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ABSTRACT

The major purposes of this third annual report of the Interagency Panel on Early Childhood Research and Development are to analyze research activities funded by the member agencies during the fiscal year 1973, and to identify changes and trends in the agencies' research plans. Chapter 1 contains information about the panel's regular and special interest group meetings and activities during fiscal year 1973, and a description of critical research needs and gaps identified by the panel. Chapter 2 contains an analysis of fiscal year 1973 research projects in the context of these needs and gaps. In chapter 3, current plans of the member agencies are presented and examined in order to determine major trends and new directions. The plans also are evaluated in terms of the degree to which they address the major needs in early childhood research and development. Activities planned or currently being undertaken by the panel are discussed in chapter 4. (Author/CS)

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TOWARD INTERAGENCY COORDINATION:

An Overview of Federal Research and Development Activities Relating to Early Childhood

Third Annual Report

Prepared for
The Interagency Panel on
Early Childhood Research and Development

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Participating Member Agencies of the Interagency Panel on Early Childhood Research and Development

- Department of Health, Education and Welfare (DHEW)
  - Office of Child Development (OCD)
  - Office of the Assistant Secretary for Planning and Evaluation (ASPE)
  - National Institute of Child Health and Human Development (NICHD)
  - National Institute of Mental Health (NIMH)
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Readers who wish to obtain a summary of the highlights of this report are referred to the following sections:

1. Introduction (pp. 1-3)
2. Chapter II, Section 1: Classification of FY '73 research (pp. 23-28)
3. Tables 1 and 2: Distribution of research by agency based on number of programs or projects in each agency, FY '73 (pp. 74-76)
4. Chapter II, Section 4: Summary analysis of all agency research, FY '73 (pp. 80-90)
5. Tables 3 through 8: All agency distribution and rank order (by percent) of areas of research, research approaches, research by kind of child, areas of research on the family, and areas of research on education, FY '73 (pp. 81-85)
6. Tables 9 and 10: Percent of total number of projects and percent of total funding, by kinds of research, FY '73 (p. 89)
7. Chapter III, Section 2: Overview of agency plans for FY '74 (pp.112-118)
8. Table 11: Agency plans for major research effort in FY '74 (pp. 114-115)
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INTRODUCTION

The Federal government continues to make substantial commitments toward improving the quality of life experienced by America's young children. Extensive research and action programs that focus on many aspects of the child's early years of life have been funded through a variety of Federal agencies. While the complex questions and issues relating to the young child's physical, mental, and social development are seemingly endless in number, Federal research and development funds, of course, are limited. In order to build a useful base of scientifically acquired knowledge about early childhood, then, agencies must plan and implement research activities systematically and with a great deal of foresight. Goals and priorities must be established and pursued; needs and gaps must be identified and addressed. For the most part, however, agencies and research institutions have found it difficult to exchange information about their immediate and long-range goals and efforts. The problems of coordination are compounded by the fact that many of the Federal agencies that share a general interest in early childhood research and development differ in their particular approaches, goals and legislative mandates.

Background

In 1970, the Interagency Panel on Early Childhood Research and Development was convened by the Director of the Office of Child Development at the request of the Secretary of the Department of Health, Education and Welfare and the Director of the Office of Budget and Management. The primary mission of the Panel is to facilitate Federal interagency coordination and cooperation in the planning, funding and implementation of early childhood research and development. General research and support services are provided for the Panel by the Information Secretariat which was established within the Office of Child Development in 1971.

Panel members meet regularly to exchange information about research programs being planned and funded by their agencies and to discuss problems and issues of mutual interest. Descriptions of the research projects funded by the member agencies during each fiscal year are collected and stored in a computer-based information system which is available for use by member agencies and which provides the data for this annual report. Research programs funded and research plans formulated during the fiscal years 1971 and 1972 have been summarized and analyzed in the Panel's first two annual reports -- Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood and Recommendations for the Future (Stearns, Searcy and Rosenfeld, 1971), and Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood, Second Annual Report (Grotberg, Searcy and Sowder, 1972). The work of the Panel is supported by a grant to the Social Research Group at The George Washington University. The member agencies contribute to the grant and the Office of Child Development contributes the Information Secretariat and the bulk of the grant funds.

Organization of the Report

The major purposes of this third annual report are to analyze research activities funded by the member agencies during the fiscal year 1973, and to identify changes and trends in the agencies' research plans. Chapter I contains information about the Panel's regular and special interest group meetings and activities during FY '73, and a description of critical research needs and gaps identified by the Panel. Chapter II contains an analysis of FY '73 research projects in the context of these needs and gaps. In Chapter III, current plans of the member agencies are presented and examined in order to determine major trends and new directions. The plans also are evaluated in terms of the degree to which they address the major needs in early childhood research and development. Finally, activities planned or currently being undertaken by the Panel are discussed in Chapter IV.

Activities of the Interagency Panel During FY '73

During the past year, the information classification system was revised in order to improve the categorization and analysis of early childhood projects and expanded in order to include data reflecting projects on adolescence. The Early Childhood Panel shares the information system with the Interagency Panel for Research and Development on Adolescence, established in October, 1972. Members of each Panel are kept informed about the activities and progress of the other Panel, and joint participation in special interest meetings is encouraged. In order to facilitate coordination of the two Panels' activities, the Early Childhood Panel extended its maximum age of focus from eight years through nine years. The Panel on Adolescence is concerned with children and adolescents between the ages of 10 years and 21 years.

During FY '73, the Panel also: (1) initiated a series of discussion meetings on issues of special interest; (2) established joint policy guidelines with the Panel on Adolescence for the release of information from the computer-based information system to non-Panel organizations and researchers; (3) continued consideration of the Family as a major theme for research planning; and (4) produced and distributed to directors of agencies a working paper on the family in order to provide specific issues and research questions recommended for member agencies to use in formulating policies and plans for funding. The response to these activities suggests that the Panel is providing significant and useful information to the member agencies.

CHAPTER I

EARLY CHILDHOOD RESEARCH NEEDS

In their efforts to increase the coordination of Federal funding of early childhood research and development, the members of the Interagency Panel have examined the planning and funding activities of the agencies to determine where coordination might best occur. Further, the Panel members have discussed these activities against a backdrop of research needs, gaps, and imbalances, to suggest new research directions or emphases. In what areas of child development, for example, should effort and activity be increased? Which research approaches are most likely to enhance our knowledge and understanding of early childhood growth and development? Although some changes and additions have been introduced, in essence the major areas of concern formulated by the Panel in FY '71 and FY '72 (see Stearns, Searcy and Rosenfeld, 1971, and Grotberg, Searcy and Sowder, 1972) have been retained in this year's report.

A predominant position in Federal planning and funding continues to be that research on early childhood should be designed to yield findings and data more directly applicable to current and future social problems and needs. This orientation, however, does not preclude concern with basic research or with research that may not have immediate value for application to social issues. Another position which continues to be strong is that attention should be given to directed research so that agencies are assured that research addresses problems of direct and immediate concern to the agencies. The Panel, aware of these continuing positions, makes its recommendations for changes so that no position becomes dominant to the point of limiting or preventing desired new research.

The Panel continues to recommend that certain fundamental research strategies and emphases be employed to a greater extent in the study of early childhood. The use of such strategies is not limited, of course, to any particular substantive area, and the approaches can be incorporated into research studies in a variety of ways and to varying degrees. The key approaches emphasized by the Panel are: (1) ecological or global research; (2) research to benefit all children; (3) longitudinal/intervention research; (4) research geared toward the improvement of methodology; and (5) research on planning and on the dissemination of research findings.

The Panel's recommendations for funding are presented again within the context of a few broad content areas. These general categories include: (1) the basic processes of development; (2) the effects of primary environmental influences, with emphasis on the family; and (3) the effects of environmental influences at the level of the neighborhood and community, including broad social programs.

These categories do not constitute a comprehensive list of research issues and areas in the field of early childhood, but rather provide an organizational framework within which the more salient research needs and gaps, as specified by the Panel, can be considered. Since most of these research needs, gaps, and imbalances have been examined in the two previous annual reports, they will be discussed in less detail in this report and emphasis will be given to elaborations of these themes introduced by the Panel during FY '73.

Section 1: Recommended Approaches to Early Childhood Research

The Ecological or Global Approach

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A variety of concerns and issues are subsumed under the rubric of ecological, global or holistic research. Perhaps this research orientation can be understood best in terms of the type of research with which it contrasts. Traditionally, studies on children have been designed so that the phenomena under consideration are intentionally isolated from other closely related factors and subsequently examined in the context of what might be termed "artifically contrived" experimental situations, rather than in the context of the larger social and physical systems in which they actually occur and typically are deeply embedded. The purpose of isolating--or bringing into the laboratory--variables of primary interest is not to distort the nature of the phenomena, but rather to afford the investigator more control over the situation and thus to facilitate the determination of cause and effect. While controversy over the issue of trading experimental control and precision for meaningfulness and significance of the situation and the behavior observed is certainly not new, a tremendous upsurge in attention to this problem has occurred among social scientists during the last few years.

Many of the theoretical, methodological and philosophical questions that relate to the issue of ecological validity are extremely complex and not likely to be untangled and answered satisfactorily for some time to come. Nevertheless, it is apparent that studies of the ecology of the child and the family are scarce, and that there exists very little systematically acquired information about the child's behavior and development as it occurs within the natural context of the home, community and society. Clearly, there is a need for more information about the interactions and relationships between children and other people and institutions within their environment, if we are to effectively deal with complex social problems and needs.

The ecological approach should not be seen, however, as a return to the atheoretical, descriptive methods that characterized the field of child development early in the century. As Bronfenbrenner (1973) points out, an ecological approach does not preclude the experimental, scientific method: "...the full impact of ecological systems for the development of both science and social policy is to be sought not in experiments of nature but in experiments of man--that is, through the deliberate design, systematic manipulation and scientific analysis of new ecological settings that can affect primary socialization processes. We refer to this approach as experimental human ecology" (p. 17).

The need for experimental human ecology is identified clearly in the Panel's recommendations for the increases in longitudinal/intervention research and in research on the impact of the systematic alterations of the environment produced by comprehensive social and educational intervention programs. At the same time, the ecological orientation has ramifications for more traditional experimental psychology conducted in the laboratory. A better account and understanding of the ecological systems that pertain to the child and the family could facilitate a more meaningful selection of the stimuli, tasks, measures and experimental situations used in the laboratory. Furthermore, there is great need for studies in which the techniques and advantages of laboratory control and naturalistic observation are combined, and in which the traditional experimenter-subject dyad is replaced by or supplemented with a more meaningful, natural social structure.

The Panel suggests that research on early childhood be conceived and designed along more diverse methodological and theoretical dimensions. As the focus of much of the research on children shifts from single, isolated variables to large-scale ecological systems, there will be an even greater need for a wide range of theoretical conceptualizations and research paradigms drawn from a variety of scientific disciplines. Increased communication and collaboration both within and across fields and disciplines is called for. For instance, the Panel recommended in its first two annual reports that research on basic developmental processes be directed more toward the interrelationships among cognitive, social and physical processes, an effort that requires new tasks and measurements and increased exchange of information and ideas across many fields of child development that traditionally have been mutually exclusive. Similarly, research on children and families as they relate to various aspects of their communities and environment will necessitate more collaborative activity among psychologists, sociologists, anthropologists, physicians, economists, and other scientists and practitioners.

Psychologists interested in the family may find that the adoption of sociological and anthropological perspectives and methods would facilitate the identification of the particular variables and dimensions in the home environment that are significant for the child's development. Interdisciplinary research could lead to the construction of richer, more comprehensive models of the home environment, and help dispel some of the myths and stereotypic portraits of the family that are promoted by much of the current social science literature. For instance, many studies on poor children have been based on one of two rather contradictory assumptions about the nature of the child's background: (1) that the child's home environment lacks adequate stimulation, and (2) that the child's home environment provides too much confusion and stimulation (Ginsburg, 1972, p. 183). For the most part, such assumptions are intuitive, are derived from the investigator's informal impressions of the child's home, and are not the products of careful, systematic analyses of the home setting. Different home environments and patterns of child rearing cannot be described and analyzed adequately within the narrow psychological frameworks typically employed in such studies. There is a need for broader, interdisciplinary approaches to the study of ethnic and social class differences in family functioning and child rearing.

Research to Benefit All Children

The Panel continues to recommend that research interests and emphases not be restricted primarily to a few specific types of populations, such as economically disadvantaged or minority group children. If research findings are to be applied to a broad range of social problems and issues, they must be generalizable to children of all economic, social and ethnic backgrounds and with a variety of physical and intellectual abilities. Furthermore, care should be taken so that a particular group does not become conceptualized in the literature as deviant from an ill-defined standard or "normal" population. Many of the studies that have taken such an approach have focused on the intellectual and social weaknesses and failures of a group of children to the extent that strengths and successes have been ignored or even obscured. A more fruitful tactic may be to investigate the way in which children respond to and cope with the particular circumstances that actually confront them in the home, school and community. In too many studies of ethnic and cultural differences, one group's performance or behaviors have been compared to those of another group without adequate consideration of the different environmental systems within which the groups function. Again, an ecological orientation to research is recommended, with special attention to the influences of the people and institutions in the community with whom the children and their families come into regular contact.

Researchers also have tended to favor certain age groups. Research on the once-neglected area of infancy has expanded considerably during the past several years, and this trend continues. Relatively little attention has been given, however, to children between the ages of two and four years. Investigations aimed at children of this age are needed, especially now that more and more preschool programs are accepting children as young as two years and day care programs for very young children are increasingly in demand.

Longitudinal/Intervention Research

The recommendations discussed thus far share a basic theme--that a greater proportion of Federal funds be directed toward multiple-variable studies that encompass children of a variety of backgrounds and abilities, their families, and the significant social and physical conditions of their everyday world. In large-scale ecological studies, however, the researcher does not have the degree of control over treatment and environmental input possible in short-term, single-variable laboratory studies. In the two previous annual reports, the Panel recommended longitudinal studies of the numerous social intervention programs currently being funded by the Federal government, as an effective means of providing information on the long-term impact on children of a variety of environmental influences. The Panel sees the synthesis of longitudinal research and broad intervention programs as an approach to early childhood that is particularly appropriate for interagency coordination, planning and funding (see Grotberg and Searcy, 1972). Increased efforts must be made to solve the large number of practical and scientific problems associated with longitudinal/intervention research methods. For example, one difficulty is that of maintaining consistent research programs in the face of changes in social policy interests, in Federal research goals and priorities, and in Federal agency and research project personnel. Other difficulties are associated with the following issues: (1) the size and representativeness of the sample; (2) the possible obsolescence of theoretical and methodological concepts; and (3) problems related to large scale data processing.

The traditional single cohort longitudinal method must be improved and alternative strategies developed and implemented. For instance, one investigator (Shaie, 1972) recently suggested that "...in those instances where the longitudinal method has in the past been deemed to be essential, we will need to substitute research designs which involve either the successive independent sampling from pre-determined population cohorts or designs involving the replication of longitudinal studies over more than one cohort" (p. 3).

In order to consider in depth the many issues related to long-term research on broad social interventions, the Panel has initiated a Special Interest Group on Longitudinal/Intervention Research. The Group's activities during FY '73 are reviewed in the section on Special Interest Area Meetings.

Research on Methodology

Studies focused on the research process itself are still few and far between. Substantial progress in the research areas and approaches identified by the Panel will be possible only if the relevant research methods can be refined and improved. For instance, more comprehensive theoretical models and better techniques of measuring, coding and analyzing naturalistic behavior must be developed for use in ecological and long-term intervention research studies.

Research on Planning and Dissemination

In line with their emphasis on increased exchange of information among funding agencies, researchers and practitioners, the Panel members stress the need for studies that are aimed at research planning and the dissemination of research results. Increased effort should be directed toward the development of the following: (1) systems that would facilitate the exchange of scientific information between researchers; (2) systems to synthesize and translate scientific knowledge into forms appropriate for policy makers and consumers; (3) dissemination models of successful programs; and (4) systems to match families in need with appropriate programs and services.

Section 2: Major Areas of Research Need

The Developmental Process

While research on basic developmental processes continues to focus heavily on cognitive processes, studies on social-emotional development are increasing in number. The Panel sees further need to investigate the many crucial aspects of socialization and personality development about which so little is known. Special emphasis is placed on research designed to investigate the interrelationships among cognitive, social and physical processes, and the ways in which these basic processes are affected by the child's environmental conditions and everyday experiences.

The gap between basic and applied research should be narrowed, and special efforts should be made to expand the domain of the major theories of cognitive development, such as Piaget's and Bruner's, so that they pertain to a greater variety of situations and processes. At present, such theories address only a small number of developmental phenomena and have been tested in the context of relatively few types of experimental tasks, measures and situations. At the same time, however, these theories and related research findings have been used as the basis of a number of educational innovations, especially at the preschool level where, for instance, procedures to teach intellectual skills such as conservation and seriation are being built into the basic curriculum. A similar problem exists in regard to evaluation and screening procedures. Measures and tests that are developed originally for experimental purposes (e.g., measures of object permanence, of classification skills, and of basic perceptual processes) are often used to evaluate and compare children without sufficient consideration or understanding of the meaning and implications of these instruments.

In recent research literature the infant has been conceptualized as an active, stimulus-seeking organism from birth, and as possessing more refined perceptual and cognitive abilities than was believed previously. We need a more complete understanding of the importance and role of stimulus change in the infant's intellectual development before we can successfully incorporate sensory stimulation into infant care programs.

Interest in the biological, physiological and genetic underpinnings of intellectual and social development continues at a high level, especially in connection with learning handicaps, mental retardation, and emotional illness. Another critical problem area concerns the effects of nutrition on the child's intellectual growth and the effects of maternal nutrition and care on prenatal and postnatal development. Similarly, more research is needed on the determinants of prematurity and low birth weight, and the long-term consequences of this condition.

More attention should be given to the positive aspects of social and personality development. For instance, research on attachment has concentrated on the infant's separation from the mother and his reactions to a stranger; we need a better understanding of the process by which the infant actually becomes attached to parents, siblings, and other adults, and of the ways in which such affectional relationships change with development.

Increased research has been recommended for the following issues: the role of play and imitation in social and cognitive development; the development of self-concept and self-worth; the dynamics of sexual and racial identity; the determinants of aggression; the development of intergroup attitudes, including racism; the development of moral and ethical behavior; and the development of sharing and altruism.

Primary Environmental Influences

The Panel, in addressing research concerns relating to the effects of primary environmental influences on the child, selected the family as the basic and critical unit; the family constitutes a major aspect of the young child's world and links the child with other major environmental systems. Each member agency of the Panel has a legislative mandate to deal with issues relating to the family, a fact which permitted a broad conceptual framework within which to address research relating to the family on an interagency basis. During the past year, representatives of the member agencies were interviewed by the Social Research Group staff about their agencies' interests in family-oriented research, and their responses were used to prepare a working paper on the family for the Panel.

This special report (Harrell, Hurt, and Grotberg, 1973) outlines the issues and questions that are of particular concern to each agency and identifies the general interagency research directions and emphases that emerge.

Underlying the agencies' concerns is the premise that the family has been excluded from the focus of most research on early childhood. Research that has been directed toward the child and the family has been limited for the most part to a relatively small number of topics and issues, such as the following: (1) parent-child interactions and relations, generally conceptualized in terms of mother-child dyads; (2) attachment and fear of strangers in infancy; (3) correlations between demographic characteristics of the parents and measures of the child's educational achievements, I.Q., attitudes and aspirations; and (4) the relationship between birth order or family size and the child's abilities and achievements.

In the Panel's special report on the family, research questions were organized around three broad categories: (1) the internal systems of the family; (2) the family and transactions with the external systems; and (3) the internal systems of the family, and the family and transactions with the external systems.

The internal systems of the family. Research questions included in the first category pertain to the internal dynamics and structure of the family without consideration of outside institutions and influences. Much of the traditional research on the child and the family falls into this category. A general concern of many of the agencies is to acquire more information on the structure of families, their modes of functioning, and their influences on child development. Investigators generally acknowledge the inadequacy of conceptualizing the family in terms of only a few models and stress the need for a more complete and accurate assessment of the variety of family forms, life styles and child rearing arrangements that exist in the United States. There is also need to determine the extent to which societal attitudes toward sex roles have changed in recent years and the effects of such changes on family decision-making processes and the functions of family members. Cultural and ethnic differences in family patterns should be described and investigated in terms of more sensitive and meaningful measures; the standard socioeconomic measures of level of occupation, education and income are deemed to be inadequate for this purpose.

The agencies' interests are weighted heavily toward studies of the determinants of successful family functioning and child development, indicating a general desire to move away from the pathological and deficit models that have pervaded much of the research on the child and the family.

The family and transactions with the external systems. The research questions in this category concern the family's relationships with larger ecological systems. A better understanding of the way in which families affect and are affected by other people, institutions and organizations is necessary for the purposes of both research and service programs. These questions in particular reflect the member agencies' interest in ecological and global approaches to early childhood research. Specific interests include: (1) the way in which the family relates to schools, hospitals, housing and neighborhood environments, and social agencies; (2) the development of programs to teach parenting skills; (3) the effects of the parents' contact with schools, jobs, and community institutions on the child's development; and (4) the development of community support systems for families with a variety of needs and problems.

The internal systems of the family, and the family and transactions with the external systems. Representatives of the member agencies expressed interest in a variety of issues that combine elements of both the internal systems of the family and transactions with the external systems. These questions tend to be quite broad and deal with complex interactions between social systems, programs or interventions and vairous processes of family functioning and child rearing. Issues identified as especially urgent include: (1) the impact of the media and of the dissemination of various types of information upon families; (2) the impact upon the family of having a handicapped child and ways in which outside agencies can help the family members cope; and (3) the impact of day care upon families and identification of families for whom day care is and is not helpful.

Specific research questions are presented according to category in Tables 13, 14, and 15, in Appendix A. The agencies submitting the questions are identified by checks in the appropriate boxes.

Environmental Influences: Community and Society

Consistent with the Panel's interest in an ecological approach to studying children, its concern extends beyond the family to the broader elements of the environment including the influences of the community and society. The major research needs identified by the Panel in the two previous annual reports concern the following general issues and areas.

What are the effects of the natural and man-made environments on the development of children? In particular, what are the differential influences of urban, suburban and rural settings on the child's physical, social and intellectual development?

There are a variety of crucial research issues related to the school. How can instructional methods be made more effective for children in general and for particular groups, such as the handicapped and mentally retarded? To what extent and in what ways can individualized instruction programs be coordinated with the general educational process? There is need for much more research on individual differences in cognitive and social abilities, and on ways to build into the educational system mechanisms for dealing with such differences. How can parents and other adults be involved to a greater extent in the educational process, whether in the home, in the community or in the school? The Panel recommends that more emphasis be placed on interrelations among key aspects of the child's school experiences (e.g., content and mode of curriculum) and significant factors in the child's home, neighborhood and culture.

More research is needed to determine the impact on the child's development of peers and significant adults outside of the family. The increase of day care and preschool programs makes this issue especially crucial in regard to infants and very young children.

There is a continuing need for research on the large number of social intervention programs funded by the Federal government. These projects are concerned with day care and preschool programs, compensatory education, health and nutrition, income maintenance, housing, and educational television. Ecological and global research approaches are especially appropriate in connection with the evaluation of these broad intervention programs. The Panel stresses the need to study the combined effects of several interventions that may affect children and their families simultaneously. Only through the joint efforts of the agencies involved, and through well coordinated planning and implementation of programs, research and evaluations, can investigators achieve the systematic control and design necessary for such large-scale efforts in experimental human ecology. The Panel is concerned with making possible the interagency communication and cooperation that must precede and accompany attempts to investigate simultaneously a wide range of programs, children and life circumstances.

Section 3: Special Interest Area Meetings

During FY '73, the Interagency Panel on Early Childhood Research and Development initiated a series of meetings on issues of special interest to some of the Panel members, primarily areas to which member agencies desire to make substantial funding commitments. The meetings are open to all members of the Interagency Panel and they are urged to invite concerned individuals from their agencies. Information about ongoing and planned research in the special interest area is presented and discussed at these sessions. Specialists knowledgeable in various aspects of the problem area and specialists involved in programs within the Federal government are invited to share their expertise with the other participants.

Longitudinal/Intervention Research

Throughout is three-year operation, the Interagency Panel on Early Childhood Research and Development has expressed an interest in the longitudinal/intervention approach to research on children, and has repeatedly recommended an increase in the use of such strategies. In August, 1972, the Panel distributed letters to the directors of Federal agencies concerned with early childhood research and development, in which it formally recommended that the agencies give high priority and long-term commitment to longitudinal/intervention research studies. In fact, this recommendation represented the first major action by the Panel in suggesting guidelines for Federal funding of early childhood research. Many of the directors in turn expressed a great deal of interest in longitudinal/intervention approaches and requested further feedback from the Panel on this particular issue. The Panel's ongoing concern for research that yields information beyond the short-term effects of various intervention programs has been voiced in the 1971 and 1972 annual reports, in a series of special Panel reports on longitudinal/intervention research (Grotberg and Searcy, 1972; Lazar, 1972; Lazar and Chapman, 1972; Sowder, 1972) released during the last two fiscal years, and in the FY '73 and FY '74 plans of the member agencies.

Two general topics emerged as central themes of the meetings held in FY '73: (1) the use in research of large data pools and research sources that already exist but are used infrequently; and (2) the use of marker variables and measures by investigators receiving Federal grants or contract funds, in order to facilitate subsequent cross research analyses.

Data sources. To address the issue of available data pools, the Special Interest Group on Longitudinal/Intervention Research received a report on a longitudinal study conducted under a contract from the Department of Labor and in cooperation with the Census Bureau. The issue of access for researchers to currently available data banks was the major focus of the discussion that ensued. The following information about the Census Bureau was brought to the attention of the Panel members: (1) the Census Bureau is entering into contracts with many agencies and doing surveys for them; and (2) Census Bureau magnetic tapes through the 1969 Survey can be made available for use in various research projects.

Several issues and projects appropriate for subsequent consideration by the Special Interest Group were suggested:

1. An inventory of social science data banks that now exist and would be available to researchers; the Panel should determine the location and nature of such data and the procedures by which researchers can gain access to them. In response to this

suggestion, the Social Research Group has compiled a file on computer-based information systems maintained or funded by Federal agencies, as an initial step in identifying appropriate data pools;

2. The possiblity of urging agencies sponsoring research to make and publicize some provision for small grant support for the exploitation of already existing data pools;
3. Determine the feasability of designing Census questions to generate information about children;
4. Exploration of ways in which to avoid or minimize content overlap in studies drawing on the same data banks;
5. The use of the Census Bureau in following up members of samples in large longitudinal studies; and
6. Issues of privacy and the appropriateness of interview questions that are asked as part of Census surveys.

Marker variables. Meaningful research requires a capacity to make comparisons between studies, to relate the findings of one study to those of another, and to extend the implications of one investigation to other populations and situations. The ability to compare and generalize findings is especially crucial in longitudinal/intervention research because of the great expense and long-term commitment involved. Up to this point, however, valid cross-study analyses have been all but precluded by the great variability in the constructs, measures and procedures that most investigators employ in their research. Consequently, the Special Interest Group on Longitudinal/Intervention Research decided to explore, with the cooperation of the Interagency Panel on Adolescence, means by which greater comparability between research studies could be achieved. Much of the group's discussion thus far has been devoted to the concept of marker variables, or, the use by independent investigators of a common set of measures and scales to describe key background and performance characteristics of their sample populations.

The Special Interest Group met periodically during the year with specialists who have had extensive experience in developing measures appropriate for longitudinal/intervention research on children of all ages. The points and recommendations advanced by the participants in these sessions are synthesized in the summary paper that appears in Appendix B. The Interagency Panels also sponsored an open discussion meeting at the 1973 Annual Meetings of the American Psychological Association, in order to solicit suggestions and recommendations from researchers not affiliated with Federal agencies. Plans are being formulated for more formal discussions and symposia at upcoming meetings of various professional societies.

Home-Focused Programs

The Special Interest Group on Home-Focused Programs was a natural outgrowth of the Panel's interest in the family as a research theme. The general purpose of the group is to describe and discuss Federally funded programs in which research and/or services are carried out at the level of the home and the family. We need systematic evaluations of existing programs plus research on other ways in which health, educational and welfare programs and institutions can be oriented toward the child and the family in the home. The Panel members feel that we need a clearer picture of the conditions under which home-focused programs are more effective in reaching children and their parents than community or institution based programs.

Several specialists knowledgeable about basic and intervention research designs were invited to the meetings to discuss home-focused programs with the other participants. Several high-priority questions relating to home oriented research and services were identified during the three sessions held in FY '73. For instance, what is and should be the scope of home-focused programs? What reasons do researchers and social service agents have to go into the home environment? What are the long-term effects of home oriented intervention programs? Are diffusion effects on siblings and neighbor children greater in home-focused programs than in center-based programs? Do parents become more deeply involved and continue to be involved longer in home-focused programs? Are children negatively affected in home programs by the lack of the peer interactions that are provided by center-based programs? Are home-focused programs more appropriate for one income group than another? How can programs be designed such that they respect ethnic differences? What steps must be taken to avoid the imposition of the staff's cultural values on the program participants? Are there certain activities for which home-oriented services and interventions are especially appropriate, e.g., care of children who are handicapped or have other special characteristics or disabilities; enhancement of parent-child interactions; instruction in basic child development information and parenting skills; or delivery of health and nutrition information and services?

The Special Interest Group also took up the closely related topic of home/hospital interface. Specialists discussed various aspects of mother-infant interaction and the effects of hospitalization and deprivation on that relationship. Some of the major points and issues emphasized by the participants are as follows:

1. Many problems relating to the effects of hospitalization on the mother and the newborn can be dealt with on the basis of existing research knowledge. Rather than more research, what is needed most are recommendations on how to promote changes in hospital and medical practices and procedures so that they mesh with the special needs and problems of the mother and her infant;
2. The dissemination of social science theory and research findings to medical personnel (e.g., through the medical school curriculum) might alleviate some of the problems produced by medical procedures which often are geared toward physical problems at the expense of psychological and emotional well-being;
3. Improved methods and strategies must be devised so that physical and psychological anomalies and developmental problems can be detected by early and periodic screening and so that the appropriate supportive services can be provided to the children and their parents;
4. We need more information about the social, cognitive and emotional consequences of the isolation and inactivity that often accompanies the care of premature and high-risk newborns;

5. There is a need for more research on Heroin- and Methadone-addicted neonates, and especially on the long-term consequences of addiction at birth; and
6. There is a need for more systematic research on the psychological impact upon children of various aspects of hospitalization, e.g., surgical procedures, partial or complete immobilization.

Guest Speakers at the Special Interest Group Meetings

Home-Focused Programs
December 13, 1972

Guest Speakers:

Ms. Jean Berman
Appalachian Regional Commission

Dr. Richard Q. Bell
Child Research Branch, NIMH

Dr. Burton White
Harvard University

Longitudinal/Intervention Research
January 30, 1973

Guest Speakers:

Dr. Frank Mott
Department of Labor

Mr. Macob Schiffman
Department of Labor

Home-Focused Programs (Home/Hospital Interface)
March 20, 1973

Guest Speakers:

Dr. Sibylle K. Escalona
Albert Einstein College
of Medicine

Dr. James Prescott
National Institute of
Child Health and
Human Development

Marker Variables
April 5, 1973

Guest Speakers:

Dr. E. Kuno Beller
Temple University

Dr. Richard Jessor
University of Colorado

Dr. J. Ronald Lally
Syracuse University

Dr. Earl Schaefer
University of North Carolina

Marker Variables
June 14, 1973

Guest Speakers:

Dr. Samuel Messick
Educational Testing Service

Dr. Dorothy Eichorn
University of California, Berkeley

Dr. Robert Emde
University of Colorado

Dr. Virginia Shipman
Educational Testing Service

Dr. David Elkind
University of Rochester

Dr. Marjorie Chandler
Office of Education
National Center for
Educational Statistics

Marker Variables
October 30, 1973

Guest Speakers:

Dr. Paul J. Jehlik
United States Department
of Agriculture

Dr. Bruce E. Beacher
United States Department
of Agriculture

CHAPTER II

DESCRIPTION AND ANALYSIS OF FY '73 RESEARCH, BY AGENCY AND ACROSS AGENCIES

This chapter contains a description and analysis of the early childhood research supported in FY '73 by the agencies on the Interagency Panel on Early Childhood Research and Development. The research of each agency is described and then briefly analyzed in terms of specific areas and categories selected by the Interagency Panel. Following the individual summaries, an analysis of the research of all agencies is presented in order to provide an overview of FY '73 research in early childhood and to indicate research areas which may need expanded support from Federal agencies.

Section 1: Classification of FY '73 Research

Interpreting the Data

The analyses in this chapter are based primarily on the number of projects supported by an agency in a particular area or category of research. Information on the total amount of funding devoted by the combined agencies to particular areas of research is also presented. When trying to interpret the data, it must be kept in mind that the number of projects supported by a particular agency or concerned with research in a particular area does not necessarily reflect a proportionate amount of funding for that agency or that area. For instance, NICHD reported 245 early childhood projects and a funding total of about 16.4 million, whereas NCET had only 11 projects, but a funding total of over $22 million.

The data collection necessarily was dependent on the availability of information from each agency. The data presented characterize the research projects as reported up to the time this document was completed. Early childhood is defined as including all ages (including prenatal) under ten years. A project was counted in the analysis if children under ten years of age were included in the research target group. It should be noted that adolescents and/or adults also may have been included in the target group.

Research projects were classified according to a number of areas, approaches and categories, designated by the Interagency Panel as needing strong support. The data reported for the various categories are generally overlapping. That is, in any one project attention may be focused on a variety of the key areas or issues. Consequently, the percentages shown do not designate mutually exclusive efforts in the various research categories. That is why the total for any agency may equal more than 100 percent. For instance, in a particular agency 40 percent or more of the total number of projects may concern cognitive development. Some, all or none of these same projects also may have been classified under other categories, such as physical health, or family related. Whenever categories are not mutually exclusive, it will be so stated.

Categories Used for Analysis

The priority areas that were selected as the basis for the description and analysis of FY '73 early childhood research are presented and defined in the following outlined list. The categories represent specific aspects of the general research needs reviewed in Chapter I and are divided into three major sections: areas of research, approaches to research, and kinds of research.

Areas of Research:

1. Developmental Processes

    Cognitive Development--includes concept formation, learning processes, language development, and sensory/perceptual development.

    Social-Emotional Development--includes coping ability, interpersonal relations, self-concept, and motivation.

    Physical Development--includes psychomotor and sensorimotor growth patterns.

    Physical Health--includes study of disease, health, and poisoning/intoxication.

2. Primary Environmental Influences

    Family-Related Research--covers studies in which some aspect of the family is given emphasis (e.g., intrafamily relationships, ecology of the home, variant family forms) but does not include parent education.

Parenting Skills--includes studies in which special attention is given to instruction in parenting, child care, or family life, and/or the effects of parent training on child development.

Intrafamily Relationships--covers research in which emphasis is placed on interactions between family members, including father, mother, and siblings.

Child Rearing--includes research in which attention is given specifically to practices and styles of rearing children.

Structure of the Family--covers research on forms and styles of family life, including variant family forms (other than nuclear family).

Ecology of the Home--research in which focus is on the child's interaction with physical and social aspects of the home surroundings.

Family and Transactions with Community and Society--covers studies in which attention is given to both the family and aspects of the neighborhood, larger community, or society, including physical environment, institutions, social programs, and socioeconomic, ethnic, and religious influences.

3. Environmental Influences: Community and Society

Neighborhood--covers research which focuses on the neighborhood and its effect on child development; includes studies of physical environment, geographical location, housing conditions, facilities, equipment and/or materials for children, community members, professional groups and institutions.

Health and/or Welfare Services--includes research on general health services, prenatal health care, family planning, nutrition programs, mental health services, foster care, adoptive services, protective services, emergency services and advocacy.

Day Care--covers research on day care for young children.

Child Advocacy--includes studies concerned with the organized support of the right of children to receive services which contribute to their overall development and well-being.

Recreation--includes research which looks at recreation programs and activities for children, including handicapped children.

Child Abuse--includes research on identification, prevention, and effects of child abuse and neglect, and development and delivery of protective services for neglected or abused children.

Education--covers projects concerned with general education and instruction, in any location or program, for school-age children; includes school achievement, individualized instruction, innovative education, television instruction, and computer-assisted instruction.

Preschool Programs--includes research on early education and child development programs for preschool age children.

Infant Education--includes projects which focus on general instruction, stimulation or enrichment for children under three years of age.

Special Education--covers projects that focus on special education for handicapped children, including mentally retarded, and aurally, visually, neurologically, orthopedically, and speech handicapped children.

Approaches to Research:

1. Long-Term--covers studies that have been ongoing, funded, or planned for a duration of more than one year; may involve any research design, not necessarily longitudinal.

2. Longitudinal--covers research on the same individuals or groups with similar characteristics to determine the effects over time of natural events or planned intervention.

3. Research on Methodology--includes studies in which a primary objective is to find better ways of designing, conducting and evaluating research efforts; includes the development of test instruments and observational techniques for a variety of content area and subject populations.

4. Research on Planning and Dissemination--includes projects in which an objective is finding better methods of planning for research, including studies to assist in setting research goals and the development of appropriate data bases for planning; also includes studies of the most effective ways of informing researchers and others of the results of completed research or the progress of ongoing research.

5. Research to Benefit All Children

   All Children--covers projects in which research target groups include children in general, i.e., not selected on the basis of a special characteristic, ability or background.

   Children with Special Characteristics--covers projects in which research target group includes children selected on the basis of a special characteristic, ability or background; includes disadvantaged, handicapped, learning disabled, bilingual, non-English speaking, gifted, and emotionally disturbed.

Handicapped--includes aurally, visually, neurologically, orthopedically, and speech handicapped, mentally retarded, and learning disabled children.

Disadvantaged--includes children from lower income and poverty levels or those designated by an agency as disadvantaged.

Ethnic or Cultural Diversity--includes projects in which research target children are selected on the basis of their ethnic or cultural diversity.

Bilingual--covers projects in which research target group includes children whose primary language is not English.

Gifted--covers projects in which research target group includes children identified as intellectually gifted.

6. Ecological Studies--covers research projects in which attention is given to the influence on child development of some combination of the family, the community and society.

7. Research on the Whole Child--covers studies in which emphasis is on the overall growth and development of the child, or on two or more of the basic developmental processes (physical, cognitive, or socio-emotional development).

Kinds of Research:

1. Basic Research--that research directed primarily toward the increase of knowledge, the improvement of understanding, and the discovery of basic relationships; not necessarily applicable to solutions of immediate problems.

2. Applied Research--results are intended to be more directly applicable to immediate problems than basic research findings; applied research may be derived from basic research or theory or may be empirical; it is aimed at showing how existing knowledge can be used in new and useful ways. In the overall analysis, applied research is considered as a category unto itself, as well as covering the following kinds of research:

    Development--concerned with the construction of tests, systems, materials, methods, media, equipment, facilities, and prototypes to provide for instrumentation of either basic or applied research.

    Demonstration and/or Replication--activities designed specifically to show the method of operation or applicability of a research or program model.

    Evaluations--includes studies to assess overall project impact; to compare various models, strategies or materials; and to determine the cost-effectiveness of planned programs.

3. Planning and Utilization of Research--covers general research support activities, related to the planning, implementation, and utilization of research; includes state-of-the-art papers, research syntheses, analyses of existing data, and dissemination of research information.

Section 2: Descriptions of FY '73 Agency Research Programs

The FY '73 early childhood research analysis covers research supported by 15 Federal research programs, administered through 9 Federal agencies. Data from some 1605 individual projects, with a total budget of approximately $272.5 million, were collected and analyzed as a basis for the descriptions to follow. The total number of projects and funding for each agency is represented below. The descriptions and analyses of the individual agencies follow, and the chapter concludes with a summary analysis of research across all agencies.

Programs and Funding in Federal Early Childhood Research by Agency, FY '73

	No. Projects	Millions
1. Office of Child Development (OCD)	142	11.1
2. National Institute of Child Health and Human Development (NICHD)	245	16.4
3. National Institute for Neurological Diseases and Stroke (NINDS)	21	6.9
4. National Institute of Mental Health (NIMH)	151	7.7*
5. Maternal and Child Health Service (MCHS)	56	4.6
6. Social and Rehabilitation Service (SRS)	54	2.5
7. National Institute of Education (NIE)	270	75.2
8. OE, Bureau of Education for the Handicapped (BEH)	248	34.5
9. OE, Division of Plans and Supplementary Centers	110	20.1**

* This figure does not include funding for the 26 Intramural Projects.

**This figure includes the funding for all Title III projects administered at the national level.

		No. Projects	Millions
10.	OE, Division of Bilingual Education	189	29.6
11.	OE, Bureau of Occupational and Adult Education (BOAE)	7	16.6
12.	OE, National Center for Educational Technology (NCET)	11	22.5
13.	OE, Right to Read Program	1	12.0
14.	OE, Office of Planning, Budgeting, and Evaluation (OPBE)	22	11.6
15.	U.S. Department of Agriculture (USDA)	69	(Funding figures not available)

Office of Child Development,
Office of Human Development,
Office of the Secretary, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $11.1 million

- Number of Programs or Projects Active in FY '73: 142

- Mission and/or Functions in Early Childhood Research:

OCD has broad administrative coordinating functions to develop priorities and strategies for early childhood research throughout DHEW. Research emphasis in OCD is focused in several areas affecting the development of the child. The health, education and welfare of children are all of concern, with studies concentrating on how various programs and environmental influences in these areas affect child development. In previous years, OCD expanded its scope from concentration on child and day care services for children ages 0-5, to more research on the family and the community, and on children with special needs. A major emphasis now is given to the study of child abuse and neglect. The Children's Bureau has the responsibility to "investigate and report" upon matters pertaining to the welfare of children.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*

Physical development
Child abuse
Recreation
Infant education
Physical health
Child advocacy

16% - 39%

Cognitive development
Family-related
Day care
Social-emotional development
Neighborhood
Education
Preschool programs

40% or above

Parenting skills
Health and/or welfare services

* When no research was reported within a category, the name was not included.

Office of Child Development,
Office of Human Development,
Office of the Secretary, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	11.5%	
Applied Research	81.3%	
Development Projects		23.7%
Demonstration Projects		33.1%
Evaluations		7.9%
Planning and Utilization of Research	7.2%	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
26% - 50%	Research on Planning and Dissemination
10% - 25%	Whole Child
	Ecological Studies
Less than 10%	Longitudinal Studies
	Research on Methodology

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

26% - 50%	All Children
	Children with Special Characteristics
	Ethnic or Cultural Diversity
	Disadvantaged
10% - 25%	Bilingual
Less than 10%	Handicapped

Office of Child Development,
Office of Human Development,
Office of the Secretary, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	Parenting Skills
	General Family-Related
10% - 25%	Intrafamily Relationships
	Family and Transactions with Community and Society
Less than 10%	Structure of the Family
	Ecology of the Home
	Child Rearing

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

10% - 25%	General Education-Related (school-age children)
	Preschool Programs
	Infant Education
Less than 10%	School Achievement
	T.V. Instruction
	Individualized Instruction
	Special Education
	Innovative Education

National Institute of Child Health and Human Development,
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $16.4 million

- Number of Programs or Projects Active in FY '73: 245*

- Mission and/or Functions in Early Childhood Research:

The main objective of NICHD is to support research in the basic processes of human development, including the biomedical processes, as well as those involved in social and behavioral development. Three main areas of investigation relate to early childhood: growth and development, mental retardation, and perinatal biology and infant mortality. Within these areas, studies range from investigations of fertility to research on the Sudden Infant Death Syndrome, to research on nutrition.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below**

- Family related
- Day care
- Health and/or welfare services
- Parenting skills
- Neighborhood
- Education
- Preschool programs

16% - 39%

- Cognitive development
- Physical development
- Social-emotional development

40% or above

- Physical health

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* This figure includes 20 intramural research projects.

** When no research was reported within a category, the name was not included.

National Institute of Child Health and Human Development,
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	68.9%	
Applied Research	27.1%	
Development Projects		10.0%
Demonstration Projects		0
Evaluations		2.8%
Planning and Utilization of Research	4.0%	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Long-term Studies (projects funded for longer than one year)
10% - 25%	Research on the Whole Child
	Longitudinal Studies
Less than 10%	Ecological Studies
	Research on Methodology
	Research on Planning and Dissemination

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

51% - 75%	All Children
10% - 25%	Children with Special Characteristics
	Handicapped
Less than 10%	Ethnic or Cultural Diversity
	Disadvantaged

National Institute of Child Health and Human Development,
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

Less than 10%	General Family-Related
	Intrafamily Relationships
	Family and Transactions with Community and Society
	Ecology of the Home
	Child Rearing
	Structure of the Family
	Parenting Skills

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

Less than 10%	General Education-Related (school-age children)
	Special Education
	School Achievement
	Preschool Programs

National Institute of Neurological Diseases and Stroke
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $6.9 million

- Number of Programs or Projects Active in FY '73: 21

- Mission and/or Functions in Early Childhood Research:

NINDS conducts, fosters, coordinates, and guides research on the causes, prevention, diagnosis, and treatment of the neurological, sensory, and communicative disorders, and conducts basic research in related scientific disciplines.

The Collaborative Perinatal Project, the major research effort in the area of early childhood, is a comprehensive investigation of women during their pregnancies and the subsequent development of the children born of these pregnancies. Monitored and recorded are the events and complications of pregnancy, labor and delivery which may contribute to a variety of neurological disorders. Data has been collected at 14 major medical centers over a period of years and will be subjected to intensive analysis.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*	16% - 39%	40% or above
Social-emotional development	Physical development Health and/or welfare services	Cognitive development Physical health Family-related

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* When no research was reported within a category, the name was not included.

National Institute of Neurological Diseases and Stroke
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	85.7%	
Applied Research	14.3%	
Development Projects		14.3%
Demonstration Projects		0
Evaluations		0
Planning and Utilization of Research	0	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

100%	Long-term Studies (longer than one year)
26% - 50%	Longitudinal Studies
	Research on the Whole Child
Less than 10%	Research on Planning and Dissemination

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Children with Special Characteristics
	Handicapped Children
26% - 50%	All Children
Less than 10%	Ethnic or Cultural Diversity

National Institute of Neurological Diseases and Stroke
National Institutes of Health, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	Family-Related

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

Less than 10%	School Achievement Individualized Instruction

National Institute of Mental Health
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $7.7 million*

- Number of Programs or Projects Active in FY '73: 151

- Mission and/or Functions in Early Childhood Research:

The objectives of the research program of NIMH are to provide support of research on the etiology, diagnosis, treatment, prevention, and control of mental illness, and the promotion of mental health. NIMH is primarily responsible, therefore, for the support of applied, clinical, and basic research aimed either at the resolution of specific problems of mental and emotional illness, or at the augmenting of knowledge regarding the parameters of human behavior--including its prediction and control.

Areas of investigation are varied, spanning a continuum from the investigation of basic cognitive, personality and socialization processes, through the development of research methodologies, to study of intervention programs and other environmental influences which may affect the healthy emotional and cognitive growth of all children.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below**

Physical development
Child abuse
Day care
Parenting skills
Child advocacy
Infant education
Neighborhood
Education
Preschool programs

16% - 39%

Family-related
Physical health
Health and/or welfare services

40% or above

Cognitive development
Social-emotional development

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* This figure does not include funding for all the 26 NIMH intramural research projects included in the total.

** When no research was reported within a category, the name was not included.

National Institutes of Mental Health
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	61.6%	
Applied Research	37.1%	
Development Projects		13.9%
Demonstration Projects		2.0%
Evaluations		8.6%
Planning and Utilization of Research	1.3%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
26% - 50%	Research on the Whole Child
10% - 25%	Longitudinal Studies
Less than 10%	Research on Methodology
	Ecological Studies
	Research on Planning and Dissemination

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

51% - 75%	All Children
	Children with Special Characteristics
10% - 25%	Handicapped
Less than 10%	Disadvantaged
	Ethnic or Cultural Diversity

National Institute of Mental Health
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
(Categories are not mutually exclusive.)

26% - 50%	General Family-Related
	Intrafamily Relationships
Less than 10%	Parenting Skills
	Child Rearing
	Structure of the Family
	Ecology of the Home
	Family and Transactions with Community and Society

- Distribution of Research on Education in FY '73:
(Categories are not mutually exclusive.)

Less than 10%	General Education-Related (school-age children)
	School Achievement
	Preschool Programs
	Infant Education
	Special Education
	Individualized Instruction

Maternal and Child Health Service,*
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $4.6 million

- Number of Programs or Projects Active in FY '73: 56

- Mission and/or Functions in Early Childhood Research:

  The major research objective of MCHS is to improve the health of mothers and children through increasing the effectiveness of health and crippled children's services. Major areas of research include studies of the improvement of child health programs and maternity health services, nutritional status, the prevalence of handicapping conditions, the utilization of paraprofessionals, health delivery systems and evaluation methodology.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below**

Day care
Recreation
Parenting skills
Infant education
Neighborhood
Education
Preschool programs

16% - 39%

Physical development
Family-related
Social-emotional development
Cognitive development

40% or above

Health and/or welfare services
Physical health

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* MCHS is now part of the Bureau of Community Health Services, Health Services Administration.

** When no research was reported within a category, the name was not included.

Maternal and Child Health Service,
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	87.5%	
Development Projects		19.6%
Demonstration Projects		5.4%
Evaluations		17.9%
Planning and Utilization of Research	12.5%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Longitudinal Studies
	Research on Planning and Dissemination
	Ecological Studies
	Research on the Whole Child
Less than 10%	Research on Methodology

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

10% - 25%	General Family-Related
	Parenting Skills
	Intrafamily Relationships
Less than 10%	Family and Transactions with Community and Society

Maternal and Child Health Service,
Health Services and Mental Health Administration, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	All Children
	Children with Special Characteristics
	Handicapped
10% - 25%	Disadvantaged
	Ethnic or Cultural Diversity

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

10% - 25%	General Education-Related (school-age children)
	Special Education
Less than 10%	Preschool Programs
	Infant Education
	School Achievement
	Individualized Instruction

Social and Rehabilitation Service, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $2.5 million

- Number of Programs or Projects Active in FY '73: 54

- Mission and/or Functions in Early Childhood Research:

The Social and Rehabilitation Service provides income maintenance, rehabilitation, and other social services to people in need. Among its research and development goals are the following: to develop methods of improving the services of community facilities through services integration and other innovative methods, to develop methods of increasing SRS client independence, particularly by developing alternatives to institutional care, and to develop and demonstrate improved methods of research utilization. Research to contribute to child welfare is conducted in such areas as protective services for neglected and abused children, adoption, foster care, day care, and rehabilitation and training for handicapped children.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*	16% - 39%	40% or above
Physical development	Parenting skills	Cognitive development
Day care	Social-emotional development	Health and/or welfare services
Recreation	Family-related	
Infant education	Physical health	
Neighborhood		
Education		
Preschool programs		
Child abuse		
Child advocacy		

* When no research was reported within a category, the name was not included.

Social and Rehabilitation Service, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	24.1%	
Applied Research	74.1%	
Development Projects		29.6%
Demonstration Projects		3.7%
Evaluations		31.5%
Planning and Utilization of Research	1.8%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Longitudinal Studies
	Research on the Whole Child
	Research on Planning and Dissemination
Less than 10%	Ecological Studies
	Research on Methodology

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Children with Special Characteristics
	Handicapped
26% - 50%	Disadvantaged
	Ethnic or Cultural Diversity
10% - 25%	All Children

Social and Rehabilitation Service, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	General Family-Related
10% - 25%	Intrafamily Relationships
	Parenting Skills
Less than 10%	Family and Transactions with Community and Society
	Structure of the Family
	Child Rearing
	Ecology of the Home

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

10% - 25%	General Education-Related (school-age children)
	School Achievement
Less than 10%	Infant Education
	Special Education
	Preschool Programs
	Individualized Instruction

National Institute of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $75.2 million

- Number of Programs or Projects Active in FY '73: 270

- Mission and/or Functions in Early Childhood Research:

The NIE mandate reasserts the National policy to provide equal opportunity and high quality education for all Americans. The Institute seeks to improve education through (1) helping to solve or to alleviate the problems of American education and to advance the practice of education as an art, science and profession; (2) strengthening the scientific and technological foundations of education; and (3) building an effective educational research and development system. One of the problem areas to be investigated is that of providing quality education to the disadvantaged. The research grants program supports research in learning and instruction, human development, measurement, and evaluation as well as studies in the academic disciplines. Work on a research and development system will focus on building an efficient organization for the dissemination of research findings.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*

Physical development
Family-related
Day care
Health and/or welfare services
Recreation
Parenting skills
Child advocacy
Infant education
Physical health
Preschool programs

16% - 39%

Social-emotional development
Neighborhood

40% or above

Cognitive development
Education

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* When no research was reported within a category, the name was not included.

National Institute of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	24.9%	
Applied Research	61.2%	
Development Projects		26.0%
Demonstration Projects		3.7%
Evaluations		13.9%
Planning and Utilization of Research	13.9%	

- Distribution of Research by Approach in FY '73: (Categories are not mutually exclusive.)

51% - 75%	Long-term Studies
10% - 25%	Research on Planning and Dissemination
	Whole Child
Less than 10%	Research on Methodology
	Ecological Studies
	Longitudinal Studies

- Distribution of Research by Kind of Children in FY '73: (Categories are not mutually exclusive.)

More than 75%	All Children
10% - 25%	Children with Special Characteristics
	Ethnic or Cultural Diversity
	Disadvantaged
	Handicapped
	Bilingual
	Gifted

National Institute of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

Less than 10%	General Family-Related
	Parenting Skills
	Intrafamily Relationships
	Family and Transactions with Community and Society
	Ecology of the Home
	Child Rearing

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

50% - 75%	General Education-Related (school-age children)
10% - 25%	School Achievement
	Innovative Education
Less than 10%	Infant Education
	Preschool Programs
	Special Education
	Individualized Instruction
	Computer-Assisted Instruction
	T.V. Instruction

Bureau for the Education of the Handicapped,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $34.5 million

- Number of Programs or Projects Active in FY '73: 246

- Mission and/or Functions in Early Childhood Research:

BEH research is primarily of a development and demonstration nature. A number of such programs provide in effect a range of educational and other services to handicapped children and their parents or to organizations serving handicapped children. The early education program supports the development of early education models to demonstrate a variety of effective approaches to teaching young handicapped children. The deaf/blind program develops innovative programs to provide comprehensive diagnostic and evaluative services for deaf-blind children and consultative services to parents, teachers and others. Other programs, e.g., the learning disabilities program, the child advocacy program, the media services and teacher training programs, and the work of the Research Division, are all concerned with providing better educational services to handicapped children.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*	16% - 39%	40% or above
Physical development	Cognitive development	Parenting skills
Family-related	Infant education	Education
Day care	Social-emotional development	
Child abuse	Preschool programs	
Recreation	Health and/or welfare services	
Child advocacy		
Physical health		
Neighborhood		

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* When no research was reported within a category, the name was not included

Bureau for the Education of the Handicapped,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	91.9%	
Development Projects		41.5%
Demonstration Projects		39.9%
Evaluations		5.2%
Planning and Utilization of Research	8.1%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
26% - 50%	Research on Planning and Dissemination
10% - 25%	Research on the Whole Child
Less than 10%	Longitudinal Studies
	Ecological Studies

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Handicapped
	Children with Special Characteristics
26% - 50%	Ethnic or Cultural Diversity
10% - 25%	Disadvantaged
Less than 10%	Bilingual
	Gifted

Bureau for the Education of the Handicapped,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	Parenting Skills
Less than 10%	General Family-Related
	Intrafamily Relationships
	Ecology of the Home
	Child Rearing
	Structure of the Family
	Family and Transactions with Community and Society

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Special Education
51% - 75%	General Education-Related (school-age children)
26% - 50%	Preschool Programs
	Individualized Instruction
10% - 25%	Infant Education
	School Achievement
	T.V. Instruction
	Computer-Assisted Instruction
	Innovative Education

Division of Plans and Supplementary Centers
Bureau of Elementary and Secondary Education
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $20.1 million*

- Number of Programs or Projects Active in FY '73: 110

- Mission and/or Functions in Early Childhood Research:

The purpose of the ESEA Title III program is to assist in providing vitally needed educational services and to support local projects designed to demonstrate innovative and exemplary methods of meeting critical educational needs. Fifteen percent of Title III funding is granted for local educational agency projects by the Office of Education for the solution of problems common to all or several states. Also 15 percent of state and local funds must be expended for research relating to the educational problems of the handicapped. Areas relevant to early childhood include reading, preschool programs, and educational technology.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below**	16% - 39%	40% or above
Family-related research	Preschool programs	Cognitive development
Child advocacy		Social-emotional development
Day care		Neighborhood
Health and/or welfare services		Parenting skills
Recreation		Education
Infant education		
Child abuse		
Physical development		

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* This figure represents the Title III funding for all projects administered at the national level and includes research on early childhood and adolescence.

** When no research was reported within a category, the name was not included.

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	96.4%	
Development Projects		40.0%
Demonstration Projects		52.7%
Evaluations		0
Planning and Utilization of Research	3.6%	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Research on Planning and Dissemination
Less than 10%	Longitudinal Studies
	Ecological Studies

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Children with Special Characteristics
	Ethnic or Cultural Diversity
51% - 75%	Handicapped
26% - 50%	All Children
	Disadvantaged
10% - 25%	Bilingual
Less than 10%	Gifted

Division of Plans and Supplementary Centers
Bureau of Elementary and Secondary Education
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	Parenting Skills
10% - 25%	General Family-Related
	Intrafamily Relationships
	Structure of the Family
	Ecology of the Home
Less than 10%	Child Rearing
	Family and Transactions with Community and Society

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	General Education-Related (school-age children)
51% - 75%	School Achievement
	Special Education
	Innovative Education
26% - 50%	Individualized Instruction
	Preschool Programs
Less than 10%	Infant Education
	T.V. Instruction
	Computer-Assisted Instruction

Division of Bilingual Education
Bureau of Elementary and Secondary Education
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $29.6 million

- Number of Programs or Projects Active in FY '73: 189

- Mission and/or Functions in Early Childhood Research:

The Bilingual Education Division (funded under Title VII) develops and operates bilingual programs aimed at meeting the special educational problems of children who come from environments where the dominant language is not English and who have limited English-speaking ability. Children speaking Spanish, French, Chinese and a score of American Indian languages are among those served. Curriculum development, staff training and parent and community involvement are important aspects of the Division's projects.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*

Physical development
Family-related
Health and/or welfare services
Recreation
Infant education

15% - 39%

Preschool programs

40% or above

Parenting skills
Cognitive development
Neighborhood
Education
Social-emotional development

* When no research was reported within a category, the name was not included.

Division of Bilingual Education
Bureau of Elementary and Secondary Education
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	98.9%	
Development Projects		14.8%
Demonstration Projects		83.6%
Evaluations		0
Planning and Utilization of Research	1.1%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Research on Planning and Dissemination
Less than 10%	Research on the Whole Child
	Ecology of the Home
	Longitudinal

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Children with Special Characteristics
	Bilingual
	Ethnic or Cultural Diversity
26% - 50%	Disadvantaged
Less than 10%	Handicapped

Division of Bilingual Education
Bureau of Elementary and Secondary Education
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Parenting Skills
Less than 10%	General Family-Related
	Ecology of the Home
	Family and Transactions with the Community and Society

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	General Education-Related (school-age children)
10% - 25%	School Achievement
	Preschool Programs
	Individualized Instruction
Less than 10%	Innovative Education
	T.V. Instruction
	Special Education

Bureau of Occupational and Adult Education,
United States Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $16.6 million*

- Number of Programs or Projects Active in FY '73: 7

- Mission and/or Functions in Early Childhood Research:

Goals of the BOAE Center for Adult, Vocational, Technical, and Manpower Education include the improvement and expansion of vocational educational guidance, counseling, placement, and follow-up systems, the improvement and expansion of cooperative education, and increasing the integration of handicapped students into vocational education programs. Two large programs, the demonstration exemplary vocational education program and the research and development program in vocational education, begin at the elementary school level and include children nine and younger as well as adolescents. However, research on childhood is a part of five basic adult education projects which include instruction in parenting skills, child care, and family life.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below**	16% - 39%	40% or above
Neighborhood Health and welfare services Preschool programs		Social-emotional development Family-related Parenting skills Education Cognitive development

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* The funding includes the amounts for two large overall programs, only small parts of which are directed toward children.

** When no research was reported within a category, the name was not included.

Bureau of Occupational and Adult Education
United States Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	100%	
Development Projects		14.3%
Demonstration Projects		85.7%
Evaluations		0
Planning and Utilization of Research	0	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Research on the Whole Child

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Disadvantaged Children with Special Characteristics
51% - 75%	Ethnic or Cultural Diversity
26% - 50%	All Children

- Distribution of Research on the Family in FY '73:
(Categories are not mutually exclusive.)

51% - 75%	Parenting Skills
26% - 50%	General Family-Related Intrafamily Relationships Child Rearing
10% - 25%	Ecology of the Home

Bureau of Occupational and Adult Education,
United States Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on Education in FY '73:
  (Categories are *not* mutually exclusive.)

More than 75%	General Education-Related (school-age children)
26% - 50%	School Achievement
10% - 25%	Preschool Programs

National Center for Educational Technology,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $22.5 million

- Number of Programs or Projects Active in FY '73: 11

- Mission and/or Functions in Early Childhood Research:

NCET under the Emergency School Aid Act supports research in television programming designed to reduce the educational disadvantages confronting minority groups. Programming includes bilingual-bicultural education, preschool education and instruction in reading and mathematics. In addition, NCET studies innovations in educational technology--such as the use of satellite television transmission to reach rural or geographically isolated populations.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*	16% - 39%	40% or above
Preschool programs	Parenting skills	Social-emotional development
	Neighborhood	Cognitive development
		Education

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* When no research was reported within a category, the name was not included.

National Center for Educational Technology,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	81.8%	
Development Projects		80.0%
Demonstration Projects		0
Evaluations		0
Planning and Utilization of Research	18.2%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
26% - 50%	Research on Planning and Dissemination
	Research on the Whole Child

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

51% - 75%	All Children
26% - 50%	Children with Special Characteristics
	Bilingual
	Ethnic or Cultural Diversity
	Disadvantaged

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	Parenting Skills

National Center for Educational Technology,
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	T.V. Instruction
	General Education-Related (school-age children)
Less than 10%	Preschool Programs
	Computer-Assisted Instruction

Office of Planning, Budgeting, and Evaluation
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: $11.6 million

- Number of Programs or Projects Active in FY '73: 22

- Mission and/or Functions in Early Childhood Research:

This office has primary responsibility for the planning, budgeting and evaluation of overall Office of Education programs and provides guidance and coordination for Deputyships in these activities, and in establishing objectives. OPBE prepares analytical studies necessary for the planning of educational policies and specifies the kinds of information to be collected for the evaluation of Federal programs in elementary, secondary, post-secondary, vocational, and special education. OPBE also prepares program memoranda, special studies, and analyses supporting the OE five-year program and financial plan.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*	16% - 39%	40% or above
Health and/or welfare services	Cognitive development	Education
Recreation		
Social-emotional development		
Neighborhood		
Parenting skills		
Preschool programs		

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* When no research was reported within a category, the name was not included.

Office of Planning, Budgeting, and Evaluation
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	0	
Applied Research	77.3%	
Development Projects		0
Demonstration Projects		0
Evaluations		77.3%
Planning and Utilization of Research	22.7%	

- Distribution of Research by Approach in FY '73:
  (Categories are not mutually exclusive.)

51% - 75%	Long-term Studies (longer than one year)
26% - 50%	Research on Planning and Dissemination
	Longitudinal Studies
Less than 10%	Research on Methodology

- Distribution of Research by Kind of Children in FY '73:
  (Categories are not mutually exclusive.)

51% - 75%	Children with Special Characteristics
26% - 50%	Disadvantaged
	All Children
10% - 25%	Ethnic or Cultural Diversity
	Handicapped

Office of Planning, Budgeting, and Evaluation
U.S. Office of Education, DHEW

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

Less than 10%	Parenting Skills

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

More than 75%	General Education-Related (school-age children)
26% - 50%	School Achievement
10% - 25%	Special Education
Less than 10%	T.V. Instruction Preschool Education

U.S. Department of Agriculture

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH

- FY '73 Funding: Not available at this time.

- Number of Programs or Projects Active in FY '73: 69

- Mission and/or Functions in Early Childhood Research:

The USDA supports research through its State agriculture experiment stations designed to promote the development of human resources. The work includes studies of issues related to childhood such as nutritional status, early childhood education, the effects of the family, social and physical environment, and cognitive and physical developmental processes. In addition, the USDA Extension Service supports educational programming for children in a variety of areas, i.e., family life, day care, and home economics.

- FY '73 Distribution of Research by Area (Categories are not mutually exclusive. One study may involve several of the areas listed.)

15% or below*

Day Care
Recreation
Infant Education
Preschool Programs

16% - 39%

Cognitive development
Social-emotional development
Education
Health and/or welfare services
Neighborhood
Parenting skills
Physical Development

40% or above

Family-related research
Physical health

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* When no research was reported within a category, the name was not included.

U.S. Department of Agriculture

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research by Kind of Research in FY '73:

Basic Research	36.2%	
Applied Research	63.8%	
Development Projects		26.1%
Demonstration Projects		2.9%
Evaluations		2.9%
Planning and Utilization of Research	0	

- Distribution of Research by Approach in FY '73:
(Categories are not mutually exclusive.)

More than 75%	Long-term Studies (longer than one year)
10% - 25%	Research on the Whole Child
	Ecological Studies
Less than 10%	Longitudinal Studies
	Research on Planning and Dissemination

- Distribution of Research by Kind of Children in FY '73:
(Categories are not mutually exclusive.)

More than 75%	All Children
26% - 50%	Children with Special Characteristics
	Disadvantaged
10% - 25%	Ethnic or Cultural Diversity
Less than 10%	Handicapped
	Bilingual

U.S. Department of Agriculture

FISCAL YEAR 1973 ACTIVITY IN EARLY CHILDHOOD RESEARCH (continued)

- Distribution of Research on the Family in FY '73:
  (Categories are not mutually exclusive.)

26% - 50%	General Family-Related
	Intrafamily Relationships
10% - 25%	Parenting Skills
	Family and Transactions with Community and Society
	Ecology of the Home
Less than 10%	Child Rearing
	Structure of the Family

- Distribution of Research on Education in FY '73:
  (Categories are not mutually exclusive.)

10% - 25%	General Education-Related (school-age children)
Less than 10%	Preschool Programs
	School Achievement
	Infant Education
	Special Education
	Individualized Instruction

Section 3: Analysis of FY '73
Early Childhood Research by Agency

The following program analyses are based on the individual program descriptions of the preceding pages. This chapter will conclude with a summary analysis of the overall Federal early childhood research picture, and will point out some of the imbalances, overlaps, emphases, and gaps in current research as well as needs for future research.

Office of Child Development. The large percentage of research devoted to health and welfare services, parenting skills, day care and preschool programs clearly illustrates the concern of the Office of Child Development (OCD) for research on the socialization of the child, particularly as it occurs in the natural context of the family, community and social institutions. For example, the family is a factor in 31 percent of the work and the neighborhood in 34 percent. Moreover, a full 14 percent of the studies were ecological in approach. The targeted populations include children in general in 50 percent of the studies, as well as disadvantaged children in 30 percent, and children selected for cultural and ethnic diversity in 32 percent. Child abuse, a growing welfare issue, is a focus of 7 percent of the research. Most of the work is applied research with significant amounts of demonstration and development projects (33 and 24 percent respectively).

National Institute of Child Health and Human Development. Research on child health, 74 percent of the work, is a major concern of NICHD. In addition, the agency emphasis on overall human development is reflected in the amount of work on the whole child, 23 percent, and the substantial emphasis on the developmental processes. Many of the projects focusing on handicapped children (19 percent) are studying the mentally retarded. However, in the majority of the projects (65 percent) children in general are the targeted population. The study of methodology, although less than 10 percent of the work, is a key area of research. Family related issues are especially important in the intramural NICHD research. Sixty-nine percent of the work is basic research and 18 percent longitudinal in design.

National Institute of Neurological Diseases and Stroke. All of the research reported by NINDS deals with the health of children in some way. The major effort in early childhood research is the ongoing long-term Collaborative Perinatal Research projects, funded at $5.5 million. The size of this project in relation to the others reported tends to distort the percentages shown on the agency page as it is counted as a single project. This Perinatal project involves basic research on the factors of pregnancy, labor, and delivery that effect the child's neurological, physical, social-emotional, and cognitive development. All of this research can be considered family-related. Other NINDS projects in early childhood are concerned with sensory-perceptual functioning and related handicapping conditions. More than 75 percent of the studies report handicapped children as the targeted population. A large amount, 48 percent, of the work is longitudinal in design.

National Institute of Mental Health. NIMH funds early childhood research in many areas emphasized by the Interagency Panel. One key area is family-related research with 35 percent of the studies involving some aspect of it. Intrafamily relationships and the ecology of the home are the most frequently studied family-related issues. In research methodology and instrumentation, another key area, NIMH reports more work (9 percent) than any other agency. The global approach is reflected in the 32 percent of work on the whole child and the 8 percent on ecological studies. The work deals with cognitive and social-emotional growth and development in 48 percent and 40 percent of the studies respectively and, as can be seen in Table I, involves large amounts of research on health and the delivery of health and welfare services. The majority of the work is basic research (62 percent); however, 37 percent is applied.

Maternal and Child Health Service.* MCHS funds research designed to promote the health of mothers and children. Physical health is studied in 54 percent of the research, and delivery of health and welfare services in 57 percent. Special emphasis in health research is placed on the study of nutrition. A number of projects (over 25 percent) are concerned with either

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*MCHS is now part of the Bureau of Community Health Services, Health Services Administration

Table 1. Distribution of Areas of Research by Agency Based on Number of Programs or Projects in Each Agency, FY '73

(Categories are not mutually exclusive)

	OCD N=142	NICHD N=245	NINDS N=21	NIMH N=151	MCHS N=56	SRS N=54	NIE N=270	BEH N=248	TITLE III N=110	TITLE VII N=189	BOAE N=7	NCET N=11	OPBE N=22	USDA N=69
Cognitive Development	●	●	X	X	●	X	X	●	X	X	X	X	●	●
Social-Emotional Development	●	●	+	X	●	●	●	●	X	X	X	X	+	●
Physical Development	+	●	●	+	●	+	+	+	+	+				●
Family Related	●	+	X	●	●	●	+	+	+	+	X			X
Neighborhood	●	+		+	+	+	●	+	X	X	+	●	+	●
Day Care	●	+		+	+	+	+	+	+					+
Health and/or Welfare Services	X	+	●	●	X	X	+	●	+	+	+		+	●
Recreation	+				+	+	+	+	+	+			+	+
Parenting Skills	X	+		+	+	●	+	X	X	X	X	●	+	●
Child Advocacy	+			+		+	+	+	+					
Infant Education	+			+	+	+	+	●	+	+				+

Table 1. Distribution of Areas of Research by Agency
Based on Number of Programs or Projects in Each Agency, FY '73
(Categories are not mutually exclusive)
(continued)

	OCD N=142	NICHD N=245	NINDS N=21	NIMH N=151	MCHS N=56	SRS N=54	NIE N=270	BEH N=248	TITLE III N=110	TITLE VII N=189	BOAE N=7	NCET N=11	OPBE N=22	USDA N=69
Physical Health	+	X	X	●	X	●	+	+						X
Education	●	+		+	+	+	X	X	X	X	X	X	X	●
Preschool Programs	●	+		+	+	+	+	●	●	●	+	+	+	+
Child Abuse	+			+		+		+	+					

X = Research in the area indicated was included in 40% or more of the agency projects.
● = Research in the area indicated was included in 16% - 39% of the projects.
+ = Research in the area indicated was included in 15% or less of the projects.
No symbol = No research was reported within the area indicated.

Table 2. Distribution of Research Approaches by Agency
Based on Number of Programs or Projects in Each Agency, FY '73
(Categories are not mutually exclusive)

	OCD N=142	NICHD N=245	NINDS N=21	NIMH N=151	MCHS N=56	SRS N=54	NIE N=270	BEH N=248	TITLE III N=110	TITLE VII N=189	BOAE N=7	NCET N=11	OPBE N=22	USDA N=69
Long-Term Studies	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Longitudinal Studies	+	●	X	●	●	+	+	+	+	+			●	+
Research on Methodology	+	+		+	+	+	+						+	
Research on Planning and Dissemination	●	+	+	+	●	+	●	●	●	+		X	X	+
Ecological Studies	●	+		+	+	+	+	+	+	+				●
Research on the Whole Child	●	●	●	●	+	+	●	●		+	+	●		●

X = Research in the area indicated was included in 40% or more of the agency projects.
● = Research in the area indicated was included in 16% - 39% of the projects.
+ = Research in the area indicated was included in 15% or less of the projects.
No symbol = No research was reported within the area indicated.

family-related issues or parenting skills. A large amount of work is longitudinal in design (23 percent), and reflects the global approach, i.e., 14 percent of the studies deal with the whole child and 11 percent are ecological studies. Research on planning and dissemination is included in 16 percent of the projects.

Social and Rehabilitation Service. Many of the 54 projects in early childhood research funded by the Child Welfare Bureau and the Rehabilitation and Training Centers of SRS are concerned with health and welfare services. Specifically, day care is studied in four percent of the work, child advocacy in six percent, and infant education in seven percent. A welfare issue of growing emphasis, child abuse, is the focus of 11 percent of the work. Research is being conducted in family-related areas, especially on intrafamily relationships which are studied in 15 percent of the work, and in parenting skills which are studied in 17 percent. The work includes almost equal amounts of basic research (24 percent), development projects (30 percent) and evaluations (32 percent).

National Institute of Education. NIE research is directed toward the improvement of learning and educational services at all levels and for all segments of the population. This objective is apparent in the research on early childhood--more than 40 percent deals with cognitive development and the education of school-age children. Additional studies center on infant eduation and preschool education. The development of the whole child is considered in 16 percent of the projects, and social-emotional development in 23 percent. Most of the research is directed at children in general (86 percent); however, a wide variety of special populations are included, such as the disadvantaged, minority groups, the handicapped, the bilingual, and the gifted. The kind of research is varied, consisting of basic research (25 percent of the projects), development projects (26 percent), evaluations (14 percent) and planning and utilization (14 percent). The dissemination of research, a goal of NIE, is studied in 24 percent of the projects reported in early childhood.

OE, Bureau of Education for the Handicapped. All of the research in the Bureau of Education for the Handicapped (248 projects) concerns handicapped children and, as Table 1 shows, is oriented heavily toward educational programs, parenting skills, and cognitive and social-emotional development. Research in special education includes work on infant education (21 percent), preschool programs (35 percent), and individualized instruction (14 percent). A smaller area of research, but one of increasing importance at BEH, is advocacy which is a focus in twenty-two studies. The emphasis is on important services and as a result more than 35 percent of the projects study the planning or dissemination of research information. The majority of the research activity supported by BEH consists of development and demonstration projects (42 and 40 percent respectively).

OE, Division of Plans and Supplementary Centers (Title III). Title III supports projects by local education agencies directed to the solution of critical educational problems common to all or several states. In FY '73, 40 percent are development projects and 53 percent are demonstration projects. Targeted populations consist of children with critical educational problems; for example, over 75 percent of the projects include minority group children, 62 percent include the handicapped, 30 percent include the disadvantaged, and 16 percent include bilingual children. A wide range of educational techniques are studied, such as individualized instruction (in 43 percent of the projects), television instruction (in 7 percent) and computer-assisted instruction (in 7 percent). The planning and dissemination of research, another important goal, is studied in 16 percent of the work.

OE, Division of Bilingual Education. Most of the 189 projects funded under Title VII involve long-term research and are concerned with providing demonstration educational programs for children for whom English is not the dominant language. The projects study methods of promoting the cognitive development, especially language development, and the social-emotional development, especially development of cultural identity, of the children. The areas of preschool education and individualized instruction are studied in 16 and 11 percent of the work respectively. The development of a wide range of curriculum materials and the development of training services for teachers are significant aspects of these programs.

OE, Bureau of Occupational and Adult Education. While the research activities supported by BOAE relate primarily to basic and vocational education for adolescents and adults, some projects or components of projects involve early childhood research and development. Selected activities that are relevant to this report include: (1) projects for educationally disadvantaged adults, which include instruction in basic parenting and child development skills, aimed at training parents to assist their children's intellectual, phsyical and social development; (2) adult education projects which include an emphasis on strengthening the family; and (3) programs at the elementary school level designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work. These interests are reflected in Table 1. More than 75 percent of the studies involve instruction of school age children. Most of the target population is disadvantaged and a significant amount of the work (57 percent) is directed at children selected for their cultural and ethnic diversity.

OE, National Center for Education Technology. NCET research consists primarily of the development (80 percent) and utilization (18 percent) of educational technology, particularly innovative educational uses of television. Though most of the programming efforts are directed to children in general (73 percent), considerable effort is directed toward children with special characteristics, e.g., bilingual children and children of cultural and ethnic diversity are the targeted population or 36 percent of the programming and the disadvantaged are the targeted population of 27 percent. Significant specific areas of concern are preschool programs and computer-assisted instruction, each a focus of 9 percent of the work.

OE, Office of Planning, Budgeting, and Evaluation. Over 77 percent of the 22 early childhood projects funded by the Office of Planning, Budgeting, and Evaluation, are evaluations of programs supported in other areas of the Office of Education. The remaining 23 percent involve planning and utilization of research. The primary areas of concern are education and cognitive development. Within these areas the research pertains to special education programs, 19 percent, and to school achievement, 32 percent. The targeted populations consist of many children with special characteristics and special educational needs, i.e., the disadvantaged are included in 46 percent of the projects, the handicapped in 14 percent, and children of ethnic and cultural diversity in 18 percent. A significant amount of the research, 27 percent, is longitudinal in design.

United States Department of Agriculture. The USDA research is concerned generally with the promotion of the well-being of the rural population. As a result, USDA reports more early childhood research that is ecological in approach (22 percent) than any other agency. In addition, the child is frequently studied within his family environment, shown by the 45 percent of the family-related projects. Within the area of family-related issues, the USDA is a leader in investigating the ecology of the home--a factor in 15 percent of the projects. The areas of child health and health and welfare services are a focus in 48 and 35 percent of the projects respectively. Many of the health studies center on nutritional status and improvement. Substantial amounts of work on the developmental processes--cognitive, social-emotional and physical (all over 25 percent)--reflect the USDA interest in overall growth and development of children.

Section 4: Summary Analysis of All Agency Research, FY '73

Tables 1 and 2 present the amount of research effort supported by the individual agencies in the particular areas and approaches emphasized by the Interagency Panel. An overview of a given agency's activities can be derived by examining the appropriate vertical column, while the total research effort across agencies in a particular category can be determined by scanning the appropriate horizontal row.

Tables 3 and 4 show the distribution of research effort in the priority areas and approaches, based on the total of the number of projects supported by all of the agencies in FY '73. The percentages of the agencies' projects that are focused on particular kinds of children are indicated in Table 5.

Table 6 shows a breakdown of all of the agencies' research on the family according to selected sub-areas, and Table 7 similarly presents a more detailed picture of research on education.

Table 3. All Agency Distribution and Rank Order (By Percent) of Areas of Research, FY '73*

N = 1605 Projects

		Percent Rank
41% - 50%	Education	43%
	Cognitive Development	41%
31% - 40%	Social-Emotional Development	36%
21% - 30%	Parenting Skills	29%
	Neighborhood	27%
	Whole Child	21%
11% - 20%	Physical Health	20%
	Health and/or Welfare Services	16%
	Family Related Research	13%
	Preschool Programs	13%
1% - 10%	Physical Development	10%
	Infant Education	7%
	Day Care	6%
	Child Advocacy	3%
	Recreation	1%
	Child Abuse	1%

* Percentages are based on the total number of projects and represent non-mutually exclusive categories.

Table 4. All Agency Distribution and Rank Order (By Percent) of Research Approaches, FY '73*

N = 1605

	Percent Rank
Long-Term Studies (longer than one year)	99%
Research on the Whole Child	21%
Research on Planning and Dissemination	17%
Longitudinal Studies	9%
Ecological Studies	5%
Research on Methodology	3%

Table 5. All Agency Distribution and Rank Order (By Percent) of Research by Kind of Child, FY '73*

N = 1605

	Percent Rank
Children with Special Characteristics	61%
All Children	53%
Ethnic or Cultural Diversity	31%
Handicapped	29%
Disadvantaged	26%
Bilingual	15%
Gifted	.2%

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* Percentages are based on the total number of projects and represent non-mutually exclusive categories.

Table 6. All Agency Distribution and Rank Order (By Percent) of Areas of Research on the Family, FY '73*

N = 1605

	Percent Rank
Parenting Skills	29%
General Family-Related	13%
Intrafamily Relationships	10%
Family and Transactions with Community and Society	4%
Ecology of the Home	4%
Child Rearing	2%
Structure of the Family	2%

Table 7. All Agency Distribution and Rank Order (By Percent) of Areas of Research on Education, FY '73*

N = 1605

	Percent Rank
General Education-Related (school-aged children)	43%
Special Education	20%
School Achievement	16%
Preschool Programs	13%
Individualized Instruction	9%
Infant Education	7%
Innovative Education	5%
T.V. Instruction	2%
Computer-Assisted Instruction	1%

* Percentages are based on the total number of projects and represent non-mutually exclusive categories.

Finally, the total amounts of funding for the designated areas and approaches are listed in Table 8.

In all of the tables, the categories are not necessarily mutually exclusive, as a single project may involve a number of research areas and approaches, and pertain to children with a variety of backgrounds and characteristics.

As can be seen in Table 1 and Table 3, research on cognitive development continues to receive substantial support from a large number of Federal agencies. Cognitive development is an area of concern in 41 percent of all of the projects reported by the agencies, and accounts for a major portion of the FY '73 funding of every agency represented on the Panel. It is important to keep in mind that research projects may address cognitive development (or any other area) in a variety of ways, and specific research questions and approaches most likely reflect a particular agnecy's basic goals or mission and general approach to early childhood research. For instance, a basic research project on the development of a specific perceptual skill and an applied study of a handicapped child's overall intellectual development may both be classified as studies of cognitive development. Therefore, while the general area of cognitive development clearly receives considerable attention from all of the agencies represented on the Panel, it does not necessarily follow that research activities in the area of cognitive development are redundant across agencies or that one agency's projects overlap significantly with other agencies' projects.

Only the area of education, addressed in 43 percent of the total projects, receives more attention, and more money (see Table 8), than cognitive development. In contrast to the overall pattern of support for cognitive development, however, support for research on education is less evenly distributed across agencies. Table 1 indicates that most agencies fund either a very large percentage or a very small percentage of education-related projects. Educational research receives heavy commitment (over 40 percent) almost exclusively from those agencies whose legislative mandates contain specific educational objectives, e.g., BEH, BOAE, AND NIE.

Table 8. Total Amounts of Funding by Research Area and Approach, FY '73

Actual Total Budget, $252.4 Million*	Overlapping Amounts**
Long-Term Studies (longer than one year)	$235.9
Education	149.5
Cognitive Development	117.1
Neighborhood	87.6
Research on Planning and Dissemination	85.3
Social-Emotional Development	84.1
Parenting Skills	78.4
Health and Welfare Services	39.0
Research on the Whole Child	38.1
Infant Education	27.4
Longitudinal Studies	25.8
Physical Health	25.5
Preschool Programs	23.9
Family-Related	13.6
Physical Development	9.8
Day Care	6.3
Ecological Studies	5.9
Child Advocacy	5.7
Research on Methodology	2.9
Recreation	2.5
Child Abuse	2.0

* The funding information was not available for USDA, NIMH Intramural or Title III research.

** Some or all of the funding amount for any one area may have supported research in other areas also. Thus the sum of the individual amounts does not equal the actual total budget.

While research on cognitive development traditionally has been the focus of a great deal of research activity, social-emotional development has received less consistent attention in early childhood research. The Panel repeatedly has underscored the need for expanded investigation of social and emotional aspects of the child's development, especially with respect to issues that have been conceptualized and dealt with primarily in terms of intellectual processes, such as learning and education. As Table 3 shows, 36 percent of all early childhood projects are concerned to some extent with social-emotional development, indicating a high level of research effort in this area. Furthermore, as can be seen in Table 4, a significant number of projects (21 percent) involves research on the whole child. In other words, social-emotional development and cognitive development often are investigated in the same study, in line with the Panel's emphasis on interrelationships between social, cognitive and physical processes. On the other hand, the mere inclusion of a variety of social, cognitive and physical measures in a study does not in itself indicate that meaningful relationships between the basic developmental processes are being investigated or that they can be discerned. A great deal of theoretical and empirical work on combined aspects of the child's development still needs to be undertaken.

Most of the agencies support a significant number of projects that are concerned with either parenting skills or the family in general. Twenty-nine percent of all projects contain at least some component of instruction in parenting, either directly through educational programs (e.g., in a demonstrations project), or indirectly through parent involvement in the actual program or activity being funded (e.g., in research on center-based, or home-based child care). Research more directly concerned with the family (e.g., a study of the structure of the family, or of the relationship between family factors and child development) is included in a much smaller proportion of studies (13 percent). While the total amount of family-related research has been increasing during the last several years, more research effort in this area is called for. Many agencies emphasize the family in their FY '74 research plans (see Chapter III).

Since the Panel has selected the Family as a major theme for interagency coordination, a more detailed examination of FY '73 research on the family is warranted. As can be seen in Table 6, research on intrafamily relationships accounts for a major portion of the studies on the family. While several of these studies involve investigations of mother-child interactions, few are concerned with the father, both parents, or the siblings. Other family-related issues receive relatively little attention. Research on the family and transactions with external systems is involved in only four percent of the total number of projects. This figure should be revised downward, however, as in many of these projects the family and community institutions merely happen to be included in the overall research design. That is, an even smaller number of studies are oriented toward actual transactions between the family and society. One such study is examining the effects of infant day care on mother-infant interactions; another is investigating linkages between the school and home. Social and physical aspects of the home environment and related effects on child development are studied in approximately four percent of the research projects (classified as ecology of the home in Table 6). Only two percent of the research projects are concerned with issues directly related to child rearing or to the structure of the family.

For the most part, then, research on the family continues to be designed along fairly traditional lines, and needs to be expanded to confront important questions about the structure and functions of the family, the family's role in child development, and the family's interactions with community and social institutions . (See Appendix A for other questions.)

Research that concerns broad social programs, and community institutions, organizations and activities, continues to receive substantial support. As indicated above, many projects pertain to educational issues and are related to a variety of school and community center programs. Interest in child care remains high, as can be seen by considering the related areas of day care (six percent), preschool programs (13 percent), infant education (seven percent), and parenting skills.

While the level of activity in the area of child abuse appears to be relatively low (slightly more than one percent), research effort related to the problems of the abused or neglected child actually has increased dramatically during the last year. Table 1 shows that activity in this area is concentrated in certain Federal agencies. Furthermore, the true degree of effort can not be determined clearly by examining projects funded in FY '73, as greatly expanded research is being planned by the Federal government for FY '74 and beyond. Note also the relatively high level of research activity in the area of health and welfare services (16 percent), which includes programs for physical and mental health, prenatal health, nutrition, family planning, and research on adoptive services, foster care, protective services, emergency or crisis services, and child advocacy (which in itself accounts for about three percent of the total number of projects).

An analysis of the FY '73 data reveals several key gaps in early childhood research with respect to the approaches designated by the Panel as being of high priority concern. In Table 4, research on methodology is shown to be involved in only about three percent of the projects. The paucity of effort directed toward methodology and research design appears to be especially critical when one considers that the Panel has recommended increased research on the family and on the ecology of the child--two areas of research in which improved scientific techniques are greatly needed.

Longitudinal studies are supported in nine percent of the projects, although Table 2 shows that these projects tend to be concentrated in a few agencies, such as NICHD, NIMH, NINDS and OPBE.

For the purposes of this report, research projects were classified as ecological if they contain some combination of factors related to the family, neighborhood, community, or society. Even with this rather comprehensive definition only about five percent of the FY '73 childhood research can be considered to involve an ecological approach. Studies of the child's life space (i.e., research directly concerned with the interrelatedness of all factors in the child's environment) are included in only one percent of the projects.

Table 9*
PER CENT OF TOTAL NUMBER OF RESEARCH PROJECTS BY KINDS OF RESEARCH, FY '73

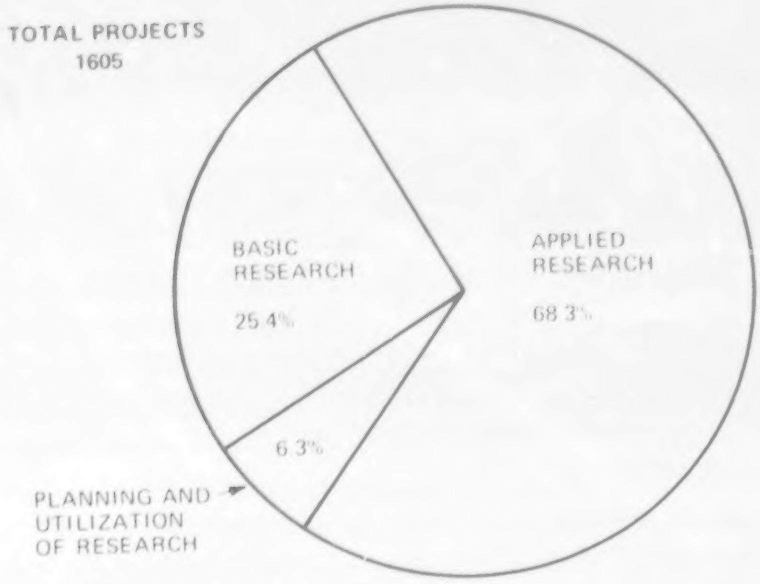
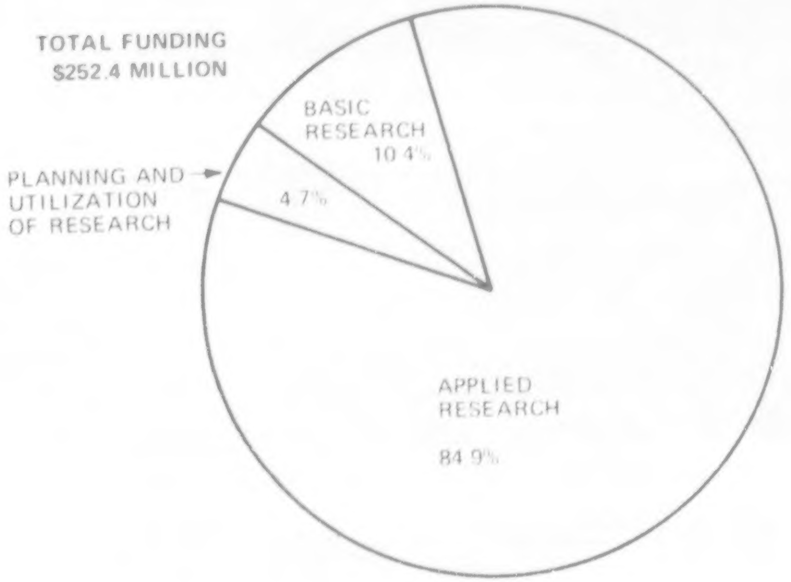


Table 10*
PER CENT OF TOTAL FUNDING BY KINDS OF RESEARCH FY '73



*Percentages represent non-mutually exclusive categories

Tables 9 and 10 present the percent of total number of research projects by kinds of research, FY '73, and the percent of total funding by kinds of research, FY '73. The three categories of basic research, applied research*, and planning and utilization of research are mutually exclusive, and refer to the primary purpose or orientation of the research activity. That is, each research project is classified in one and only one category. For instance, a research project may contain a development component, but be classified as basic research if that is, in fact, the major orientation of the project.

Tables 9 and 10 show that not only does applied research account for a large percentage of the activity supported in FY '73, (68.3%), but it receives an even greater percentage of the total funds expended by the member agencies in FY '73, (84.9%).

This concludes the presentation and analysis of FY '73 research projects. The kinds and areas of research and approaches to research planned by the agencies for FY '74 will be examined in the next chapter.

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*Applied research includes development, demonstration, evaluation, and general research of an applied nature.

CHAPTER III

AGENCY PLANS FOR EARLY CHILDHOOD RESEARCH, FY '74

The FY '73 research activities funded by the agencies that comprise the Interagency Panel on Early Childhood Research and Development were described and analyzed in the preceding chapter. The research efforts and objectives planned by the member agencies for FY '74 are presented in this chapter. Descriptions of each agency's major research priorities for FY '74 are presented first. The individual descriptions are followed by an overview of the combined agencies' plans, and the various objectives are analyzed and discussed in light of the research recommendations specified by the Interagency Panel. In addition, more detailed information about activity planned by the agencies in specific research areas is presented in Appendix C.

Information about plans was derived from documents and materials provided by the various agencies. At the time this report was being prepared, the objectives and priorities established by many of the agencies were tentative and/or incomplete, and had not received final approval. The descriptions that follow, then, do not necessarily represent offical and/or final statements of agency plans.

Section 1: Description of FY '74 Plans, by Agency

Office of Child Development

OCD gives priority to research that focuses on child development as it occurs in the natural context of the family and primary social institutions. Some specific areas of research emphasized in the plans (tentative at the time of writing) for FY '74 are the following:

1. Child development and the family.
    a. The socialization of the child and the family-school interface.
    b. The interaction of families with institutions other than the school (e.g., health, social services, law) with respect to the socialization of the child.

c. Adaptation of families to changes in social circumstances.

d. The effects of public policy and social trends on the family and developing child.

2. Children at risk and the child welfare system.

   a. Minimizing the separation of children from their families, including minimizing initial placement incidence and developing constructive deinstitutionalization.

   b. Child abuse and neglect, including case identification, intervention in existing abuse/neglect cases, long-term prevention, and national clearinghouse for information. (See section on DHEW, Coordinated Agency Efforts in the Area of Child Abuse and Neglect.)

   c. Upgrading the quality of institutions.

3. Child advocacy.

   a. Development of a coherent focus for Departmental efforts in child advocacy as a guide to funding decisions.

   b. Exploration of strategies of advocacy to see which best serve the ultimate purpose of making institutions more responsive to the needs of children.

   c. Determination of significant variables so that more structured research may be undertaken to determine the costs and benefits of different modes of advocacy.

4. Television and children.

   a. The role television plays in family relations and family social interactions; the influence of family functioning on children's viewing patterns.

   b. The role of television in forming children's attitudes about social stereotypes and the potential of television to present content which communicates the full range of human ability and accomplishment.

   c. How television content can be used to communicate to children, and encourage the performance of, socially valued behaviors.

   - d. How the impact of current television programming can be moderated by utilizing other socialization agents (e.g., parents) to buffer or enhance television content.
   - e. How television viewing affects the very young child, e.g., the effects of television on reality testing and conceptual development of preschool age children.

5. Day care.
   - a. Examination of major determinants of cost and quality of care to children, with emphasis on effects in variations in staff/child ratio and level of staff professionalism, on a wide range of possible short-term child development outcomes.
   - b. Development and analysis of information related to day care consumer preferences, with emphasis on major variables related to parental preferences, including cost, convenience, and parental perceptions about what constellation of services their children may require.

National Institute of Child Health and Human Development

NICHD conducts and supports an integrated program of research into the sequential changes characteristic of individual development from the moment of fertilization through old age and death. The approach cuts across disciplines and spans both normal and abnormal development. A basic research objective is to provide a sound scientific basis for improvements in the health and well-being of the American people, especially mothers, children, and the aged.

NICHD supports research in connection with three major areas of emphasis: (1) population studies; (2) child health; and (3) aging. Research in Child Health, which is the division of concern for the purposes of this report, is administered through three major branches or programs: (1) Perinatal Biology and Infant Mortality; (2) Mental Retardation; and (3) Growth and Development.

Specific research areas of child health that have high priority for FY '74 - FY '78 are as follows:

1. Perinatal Biology and Infant Mortality.
    a. Pregnancy and maternal health, including the effects on maternal and fetal health of maternal complications and diseases such as diabetes mellitus, anemia, urinary tract infections, poor nutritional status, and psychic stress of pregnancy.
    b. Embryonic development, including developmental pharmacology, the impact on the fetus of prescription and over-the-counter drugs, the impact on the fetus of exogenous environmental factors, and effects of maternal infections on fetal development.
    c. Low birthweight.
    d. Birth process, respiratory distress syndrome, and other problems of adaptation.
    e. Sudden infant death syndrome.
2. Mental Retardation.
    a. Epidemiology and etiology of mental retardation, including effects of lead poisoning, pollution, and the man-made environment, effects of drugs both prenatally and postnatally, of malnutrition and undernutrition, trauma, parental care and stimulation patterns, and genetic factors.
    b. Cytogenetics, including continuation of research on synthesizing the gene for rabbit globin, assessment of incidence and prevalence of chromosomal abnormalities, determination of medical and behavioral significance of minor chromosomal abnormalities, improvement of antenatal diagnosis, and mapping of human structural and regulator genes through linkage studies and cell hybridization techniques.
    c. Inborn errors of metabolism, including: the development of better methods for early detection of inborn errors of metabolism through transabdominal amniocentesis; development of a more efficient system to diagnose heterozygotes, through

loading tests and tissue culture techniques; the development of efficient, economical and readily available methods for multiple screening of newborn infants for inborn errors of metabolism; development of therapeutic diets for those patients with inborn errors of metabolism whose condition is amenable to this approach; hybridization of human cells with inborn mutation; and studies on the regulation of differentiated functions in these hybrid cells as they relate to inborn errors of metabolism.

   d. Prevention, early diagnosis and treatment.

3. Growth and Development.
   a. Physical growth and maturation, especially the hormonal control of growth, genetic contributions to physical growth, individual patterns and physical growth over time, and neuromuscular disorders.
   b. Behavioral, cognitive, and social development, including: developmental biology (the relation between behavioral phenomena and neuro-endocrinological, psychophysiological, electrophysiological, and neurochemical processes), with emphasis on cognitive development, the learning process, human communication and social development.
   c. Nutrition, and especially nutritional problems and their sequelae for low-income families, and short-term and long-term consequences of malnutrition and/or hunger on mental development, social behavior, and performance capacity.
   d. Adolescent development.
   e. Prevention of accidental injury.
   f. Developmental immunology, including the relationship between secretory immunologic system and childhood diseases.
   g. Developmental pharmacology.

All relevant areas of science are involved in the research activity planned by NICHD: biomedical, behavioral, and social. There is a heavy emphasis upon multidisciplinary efforts, and longitudinal studies are utilized to study relationships across developmental stages.

National Institute of Neurological Diseases and Stroke

While NINDS supports a number of small projects that concern neurological, sensory, and communicative disorders in children, one large longitudinal study accounts for most of the early childhood research supported by this agency.

The Collaborative Perinatal Research project is a comprehensive, prospective investigation of women during their pregnancies and the subsequent development of the children born of these pregnancies. Monitored and recorded are the events and complications of pregnancy, labor and delivery, which may contribute to a variety of neurological disorders. The observations on some 55,000 women during their pregnancies were made during the years 1959 through 1966 at 14 collaborating, major medical centers distributed throughout the United States. Data collected at these major medical centers have been submitted to the Perinatal Research Branch, National Institute of Neurological Diseases and Stroke, which has been responsible for coordinating the program and is responsible for analysis of the data. The current major emphasis is on the follow-up examinations of children at seven years of age, which include neurological, psychological and visual screening examinations and an evaluation of the socioeconomic environment in which the children live. At eight years of age, there is a detailed assessment of speech, language and hearing. The evaluations at ages seven and eight are designed to identify specific neurological problems, including subtle defects of the nervous system, such as, learning disabilities and minimal brain dysfunction. Data collection for the program will be completed in FY '74. The data, on an ethnic basis, represent about 25,700 white, 25,800 Black, 3,700 Puerto Rican, 250 Oriental and 300 other Study registrants. The population is mainly urban.

Data collection is in its final year, and the major emphasis in FY '74 will be on data analysis and interpretation, and production of reports for publication. Basic analyses to be completed in FY '75 are planned for the following primary areas: (1) cerebral palsy; (2) mental retardation; (3) communicative disorders; (4) vision; (5) convulsion; (6) learning and education disorder; (7) minimal brain dysfunction; (8) neuropathology-epidemiology of death; (9) birthweight-gestation; and (10) congenital malformation.

National Institute of Mental Health

Research training and service objectives of the Center for Studies of Child and Family Mental Health for FY '74 include the following:

1. Stimulate and support projects that view children and families in terms of their strengths and potential, rather than in terms of individual or cultural psychopathology.
2. Stimulate and support projects which attempt to explore whether and in what ways cultural differences are causally related to decision-making and selection of behavior options.
3. Stimulate and support projects that view children and families as interdependent systems in transactions with other social systems for maintenance of mental health.
4. Support projects which define and evaluate the competence needed by children to cope with the changes within families and non-family groups.
5. Develop and support projects that explore antecedent social conditions and processes which influence decision-making and change in family life (prevention) and deemphasize those which deal exclusively with undesirable social outcomes and ameliorations (intervention). Evaluate options most likely to produce desired change.
6. Develop and support projects which identify and explain the sociological and behavioral concommitments of social structures that effect the mental health of children and families. Develop and evaluate strategies intended to potentiate the responsiveness and flexibility of these structures.
7. Stimulate and support projects that view children within a developmental framework to assure that the needs of children at different stages are appropriately served.
8. Support projects that view children within the total environment (or as a member of a social ecology, i.e., a family, school, cultural group, society).

9. Develop and support longitudinal research on families, not so much to study their life cycles as we have done in the past, but to assess the processes of how changes occurred in their social circumstances, and how these changes were related to changes in their behavior.
10. Develop and support projects which explore the commonality (rather than uniqueness) of behavior across social classes, so as to better understand the social-psychological impact of class on families (a disproportionate number of studies of families have been of lower class populations).
11. Support projects that evaluate how families function as facilitating systems, and how families choose among available options in utilizing existing supportive services.
12. Support projects which develop and assess coordinated and effective means of delivering and obtaining health and mental health services with emphasis on the provision of primary care within ready reach of all children.
13. Stimulate and support projects to evaluate the efficacy of the new "parenting" training models.
14. Develop and support training models that emphasize family-centered approaches to prevention and treatment.
15. Develop and evaluate effective counseling services for adolescents designed to prevent the development of serious emotional problems.

Maternal and Child Health Services*

Research plans of Maternal and Child Health Services are made in line with several long-term research priorities. The selected priorities related to early childhood research and development are:

1. Health delivery systems for children.
2. The nutritional status of children in this country.
3. The health issues in group care facilities for very young children.
4. The utilization of paraprofessional health personnel.

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* Now part of the Bureau of Community Health Services.

5. The development of family planning as a component part of comprehensive maternal health services.
6. The evolvement of methodology and strategy for evaluation of health programs.
7. The prevention, diagnosis and treatment of child abuse; all health issues related to child abuse.

In addition, the Report of the National Conference on Research in Maternal and Child Health (MCHS, 1973) summarizes the research priorities by authorities in this field which will influence research planning in the future. Many of the recommendations include the goals listed above; for example, ways to improve the provision of health services to mothers and children and the evaluation of the effectiveness of these services. Specific problems in other areas include: (1) the population covered under existing health insurance plans; (2) the barriers to the use of existing health services; and (3) the obstacles to planning and providing regional centers for mothers and handicapped children and youth. Some specific diseases and health problems recommended for study are: (1) nutrition and pregnancy; (2) child abuse, including prevention and earlier identification and management of the abused child and family; and (3) hypertension in children and youth as a precursor for hypertension in adults.

Social and Rehabilitation Service

The research plans of the Social and Rehabilitation Service reflect its basic goal of helping America's vulnerable and handicapped people overcome dependency, alienation and deprivation. In line with this mission, special emphasis is placed on the development of programs and services in which self care for individuals and families supersedes institutional care.

The Child Welfare Bureau plans research in the following areas:

1. Early and periodic screening, diagnosis and follow-up of children, to provide comprehensive health screening of children eligible for Medicaid (to age 21).

2. Day care.
    a. Effect of day care on participation in the labor force by mothers.
    b. Factors that influence the demand for and use of day care.
    c. Alternative means of day care.
3. Foster care.
    a. Alternatives to foster care (e.g., expanded adoption options).
    b. Methods of preventing institutionalization of children and separation from the family.
4. Child abuse.
    a. Determine early warning indicators; develop case finding techniques.
    b. Cost-effectiveness of the delivery of protective services.

SRS will continue to support a regional system of 22 research centers at universities and medical schools. Emphasis is placed on basic medical research and the development of treatment and rehabilitation services for a wide range of disabled, handicapped and disadvantaged people.

National Institute of Education

Recently adopted priorities (early December) for NIE allocation of new funds for FY '74 include the following:

1. Provision of essential skills such as reading, language development, writing, and arithmetic, to all citizens.
2. Improvement of the productivity of resources in the educational system.
3. Understanding and improving the relationship of education and work.
4. Development of problem solving capability in the educational system at the state and local levels.
5. Increasing diversity, plurality and opportunity in American education.

Topics of research in which activity is likely to be started or continued cover career education curriculum and instruction, technology and productivity, methodology, objectives and evaluation, dissemination and research and development personnel.

In early learning, three of the major areas being emphasized in the development of research priorities are:

1. Measurement and evaluation.
2. Programmatic research (i.e., preschool programs and day care, parent involvement, media, family and neighborhood).
3. Basic research.

There is also an emphasis on the development of research procedures and measurement techniques which will lead to the design of studies to identify relationships between environmental variables and children's behavior.

More detailed plans for early childhood research were not available at the time this report was completed.

OE, Bureau of Education for the Handicapped

Research plans of the Bureau of Education for the Handicapped reflect a basic commitment undertaken by the Office of Education to insure that all handicapped children receive special education services to enable them to develop to their fullest potential and thereby reduce their degree of dependency. Work will continue on the four objectives set by BEH in FY '71, and efforts will also be directed toward a fifth objective for severely handicapped children. The five primary goals are:

1. To assure that every handicapped child is receiving an appropriately designed education by 1980 (95% by 1978).
2. To assure that by the year 1977, every handicapped child who leaves school has had career educational training that is relevant to the job market, meaningful to his career aspirations, and realistic to his fullest potential.

3. To secure the enrollment by 1978 of 850,000 (85%) preschool aged handicapped children in Federal, State and local educational day care.
4. To assure that all handicapped children served in the schools have sufficient trained personnel who are competent in the skills required to aid the child in reaching his full potential.
5. To enable the most severely handicapped children and youth to become as independent as possible, thereby reducing their requirements for institutional care and providing opportunity for self-development.

In FY '74, major emphasis will be given to the addition and study of the fifth basic goal, to a reexamination and reassessment of significant research issues in the initial goal areas, and to the adoption of a management process which facilitates the timely responsiveness of the research program to needs identified in the field and in BEH programs. Resources not previously committed will be directed toward refining BEH research plans, and initiating new projects consistent with already identified needs and/or needs identified as most critical in the early stages of the planning process.

OE, Division of Plans and Supplementary Centers

With the uncertainties of future funding, the ESEA Title III program has decided to use the $13 million uncommitted funds for FY '74 for the diffusion of educational innovations on a national basis. Therefore, the plans for FY '74 involve changes in strategy from development to dissemination and do not deal with substantive areas of research. During FY '74 Title III will review and fund on-going projects submitted to them for purposes of national demonstration. The projects may include educational innovations developed under previous Title III support or those developed locally. A requirement will be that the programs have been proven successful. In cases where local need can be demonstrated and a program proven successful in meeting these needs can be identified, funding may be available for project installation. The exception to this is the plan to fund a few projects aimed at developing methods of preparing teachers to identify and cope with neglected and abused children in their classrooms.

OE, Division of Bilingual Education

The grants funded under ESEA, Title VII for bilingual education currently may be used for the following purposes:

1. Bilingual instruction (using two languages as mediums of instruction) in the regular school program.
2. Instruction in the history and culture associated with the students' languages.
3. Establishment of closer cooperation between school and home.
4. Early childhood education designed to improve the child's learning potential.
5. Adult education, particularly for parents of children participating in bilingual programs.
6. Vocational-technical training and bilingual programs designed for part-time pupils, dropouts, or potential dropouts.

OE, Bureau of Occupational and Adult Education

The FY '74 plans described here come from the Office of Research and Development in BOAE and represent the planned expenditure of the Bureau's Discretionary Vocational Education Research funds. The ORD plans suggest the range of concerns of all of BOAE. They will undergird existing efforts and should lead to the improvement or expansion of current vocational education programs. The projected areas of study are as follows:

1. Curricula Studies: Information is needed upon which to base curriculum planning and curriculum development activities.
2. Disadvantaged, Handicapped, and Minority: Information is needed to improve vocational education and vocational education opportunities for disadvantaged, handicapped, and minority populations.

Applied studies will be supported to produce information that is designed for use by decision makers at the Federal, State, and local levels.

3. Alternative Work Experience Program: Information is needed to improve and extend work experience programs.
4. Guidance, Counseling, Placement, and Student Follow-up Services: Comprehensive systems of guidance, counseling, placement, and follow-up services for students and adults need to be improved.
5. Manpower Information and System for Education: Job, manpower, labor market, and demographic data are required by public, private, and proprietary educational administrators, planners, evaluators, curriculum developers, career counselors, teachers, and students.

National Center for Educational Technology

No statement of plans was available at the time this report was written.

OE, Right to Read Program

The National Right to Read Effort is designed to demonstrate effective procedures for eliminating functional illiteracy and for preventing their occurrence or reoccurrence. The Effort proposes to prevent functional illiteracy and provide corrective remediation for those who are presently experiencing the results of being functionally illiterate.

The goal of Right to Read is to insure that by 1980, 99% of all people under 16 years of age living in the United States and 90% of all those over 16 will possess and use literacy skills. The goal implies a total national thrust, as distinguished from a program, to focus on the reading literacy problems in the nation.

The program provides for the facilitation of services and limited financial and other resources to enable various educational institutions, governmental agencies, private industries, corporations and foundations to insure collectively the reading success of children in the schools and to eradicate illiteracy among the adult population.

The State education component of the National Right to Read Program establishes a structure to enable State and local education agencies to address the organizational, managerial, and instructional practices which inhibit reading success among both children and adults.

Objectives for FY '73. The Right to Read objectives for FY '73 were divided into four areas: (1) school-based programs; (2) community-based programs; (3) state education agencies; and (4) cross bureau coordination.

1. Overall School-Based Objectives: To increase at a rate of month-for-month the average reading level of students in at least 50% of the Right to Read funded school-based programs.
2. Overall Community-Based Objective: To increase at a rate of month-for-month the average reading skills of functionally illiterate adult participants in at least 50% of the 74 Right to Read community-based programs as measured by pre- and post-tests, or where criterion-referenced measures are used in at least 50% of of the participants will accomplish the first year objectives specified in the projects.
3. Overall State Education Agency Objective: To provide financial, technological, and human resources to twenty additional state education agencies to assist them in the development of an exemplary state-wide program for the improvement of reading instruction to affect every school district in their state.
4. Overall Office of Education Cross Bureau Coordination Objective: To introduce and apply Right to Read strategies and techniques to reading activities of nine OE Bureaus, and to institute periodic reporting to the Right to Read program.

Plans for FY '74. Those activities indicated for FY '73 will be continued in FY '74. To insure a 3% reduction in literacy in FY '74, the Right to Read Program will:

1. Monitor and provide technical assistance to Right to Read's program validation contract.
2. Coordinate twenty demonstration projects in teacher education and reading.

3. Implement mechanisms for reading research translation.
4. Train cadre of state technical assistants.
5. Fund and provide assistance to ten additional Right to Read states.
6. Coordinate adult reading academy in public libraries.
7. Provide technical assistance to adult literacy television.
8. Coordinate collection and dissemination of information regarding programs in cross bureau and cross agency coordination.
9. Provide additional technical assistance to Office of Education programs in cross bureau and cross agency coordination.
10. Assume selected activities of National Reading Centers.
11. Monitor ten special reading projects funded by ESAA.
12. Coordinate 54 new special reading projects funded by ESAA.
13. Add three bureaus to cross bureau coordination, namely, Higher Education, Emergency School Aid Act, and the Bureau of the Handicapped.
14. Initiate contact and work with major corporations.

OE, Office of Planning, Budgeting and Evaluation

The OPBE FY '74 Evaluation plan continues the two principal objectives of prior years aimed at contributing to policy and program decisions. The first objective places primary emphasis on conducting national impact evaluations of major OE programs. The criteria for selection of those to be performed each year include:

1. Studies which will supply information for Congressionally mandated evaluation reports.
2. Studies which focus on the effectiveness of specific programs, as compared to those which provide for general data collection.
3. Studies which provide inputs to requests for upcoming legislative renewals.
4. Studies of programs which are of special current interest and policy concern to either the Congress, the Executive Office of the President, the Department, OE or the general public.

5. Studies of major programs (high dollar value and/or impact on large target populations).
6. Studies of programs which impact on OE, Education Division or Department objectives or priorities.

The second objective focuses on a wide range of evaluative and planning studies concerned with educational policy questions, issues and problems not answered by program impact studies. These studies subject the issues to analysis, collect relevant data and shed light on alternative choices to be considered. The studies are generally not specific to a particular program, but may lead to program formulation or legislative proposals. It should be noted that the studies in this plan are not the only mechanism for analysis of policy issues. The two educational policy research centers at Stanford Research Institute and Syracuse University conduct long-term programs of research in selected critical policy areas and also provide capability for a limited number of quick policy analyses.

The United States Department of Agriculture

The Department of Agriculture supports research through the Cooperative State Research Service and educational programs through the Extension Service. Major thrusts of the research program with respect to children for FY '74 largely carried out at the State agricultural experiment stations, center on nutritional status and nutritional improvement, early childhood education, effects of the family, social and physical environment, and of day care center programs. Other research concerns are with cognitive and linguistic processes and with patterns of young children's physical, motor and cognitive development.

Major areas of educational programming by the Extension Service with respect to children, largely carried out by the State extension services, centers on home economics, family life, and early childhood education including child care, day care, nutrition and early learning and development.

The Agricultural Research Service (ARS) of the Department of Agriculture conducts a variety of research with the general goals of improving the dietary situation, the nutritional health, the levels of living, and the home management practices of families and individuals in the United States. Much of the program is oriented toward foods and nutrition. Basic information is developed to assist the conservation and optimum use of food resources to promote the nutritional well-being, health, and personal satisfactions of all people in the nation.

A major focus of this research is to obtain information on human requirements for nutrients and the ability of various foods to provide these nutrients. The goal in this research is to provide a sound basis for dietary recommendations for normal individuals throughout their lives. One of the high priority risk groups in these studies includes the infant and young child. The studies of this group will attempt also to identify the individuals or the groups of individuals in the early childhood age group who could benefit by an alteration or regulation of their dietary intake of various nutrients, to find out how these should be regulated, and to assess the potential benefits from dietary change.

The ARS has the responsibility for nationwide food consumption studies, not only for different population groups but among individuals of the same group. The nutrients and the foods consumed by children under one year, one to two years, three to five years, and six to eight years of age are assessed separately in these studies. Research based guidance materials are developed that relate to food budgets, dietary guides, and other aids to help families obtain better diets and make the most advantageous use of their monetary and time resources. Food budgets for families at different income levels and with children at preschool ages are developed, along with the more specific budget requirements for the children themselves.

ARS also conducts a research program to improve levels of rural living, on resources available to families, the decisions families make concerning their use, the decision-making process, and existing levels of living. These concerns with the family include both the early childhood and adolescent years.

The Food and Nutrition Service (FNS) conducts studies and surveys as well as nutrition education and training for the Child Nutrition Program of the USDA. Their studies include methodology to increase the effectiveness of child nutrition programs, evaluation or assessment of the impact of various food distribution programs, and the testing of new means of improving these diets for children. Projects include evaluation of various new foods and food service delivery systems, food acceptance and pilot studies on nutrition education for preschool children.

Department of Health, Education and Welfare: Coordinated Agency Efforts in the Area of Child Abuse and Neglect

Inasmuch as the interests and concerns of the members of the Inter-Agency Panel on Early Childhood Research and Development are reflected in the Panel's concerns, prevention of child abuse and neglect has become an important part of the efforts of the Interagency Panel toward exchange of information and cooperative effort. Although child abuse has been a continuing concern for certain agencies within the Department of Health, Education and Welfare, recently there has been an increased awareness of the problem and the need to seek solutions. The Interagency Panel has been instrumental in developing a state-of-the-arts paper on child abuse and neglect which will be completed early in the 1974 calendar year for distribution to panel members. This paper will provide information to the panel agencies to be used in developing their plans and is an integral part of the information dissemination process associated with this cooperative effort. A limited distribution to key agencies of an extensive annotated bibliography of research and development studies has already been accomplished.

As envisioned by the Department of Health, Education and Welfare, there are now three factors in the equation that describes the conditions which result in child abuse. The initial factor is the child, the second the abusing individual, and the third, stress factors in the environment which, upon reaching a given level, trigger a reaction on the part of the abuser resulting in child abuse or a continuation of chronic child abuse and neglect.

The Federal plans for FY '74 call for a concerted attack by a number of agencies on problems involving all elements of this equation. The general approach envisioned by the Federal agencies is to assist the states in carrying out the work necessary to alleviate conditions and incidents of child abuse and neglect by funding demonstration projects and experimental studies, the results of which could provide solutions to the problem. The approach which the agencies within the Department will use in this area is one oriented toward promoting the delivery of state and local services not only to the vulnerable child, but to the family as well. Moreover, this focus incorporates a cooperative effort among the involved agencies toward finding solutions for the protection and care of vulnerable children through (1) identification, (2) intervention, (3) prevention, and (4) public education with regard to the problem of child abuse and victims of child abuse.

Several agencies which are members of the Interagency Panel on Early Childhood Research and Development are directly involved in a Federal child abuse effort: The Office of Education, the Social Rehabilitation Service, the Office of Child Development, The Bureau of Community Health Services, The National Institute of Child Health and Human Development, and the National Institute of Mental Health.

Although the plans of the various agencies go beyond research and development efforts, only those R & D components of their child abuse and neglect efforts will be addressed. The plans which will be put into effect in FY '74 are presented below by agency.

Office of Child Development

1. Development and dissemination of informational materials and support to all full-year and summer Head Start programs and experimental projects to include an emphasis on the identification and prevention of child abuse and neglect as a part of the full range of Head Start program activities.
2. Development and utilization of a survey instrument which will review local child protective service programs for child abuse and neglect in order to develop program models for demonstration in FY '75.

3. Action as a lead agency in a joint effort with SRS and the Bureau of Community Health Services Research and Evaluation in funding and evaluating demonstrations of child abuse and neglect programs utilizing an integration of existing services and current knowledge at local community and/or state levels.

Social Rehabilitation Service

1. The design and implementation of a three year research project to determine the early warning signals of child abuse and neglect which indicate need for immediate intervention and for the delivery of appropriate services to prevent child abuse and neglect.
2. The development, under the aegis of the Early and Periodic Screening Diagnosis and Treatment (EPSDT) as carried out under Medicaid, of procedures to detect and treat child abuse and child neglect in early stages.
3. The securing of information from ten selected states and thirty local welfare departments through the regional offices on problems in providing services to abused and neglected children for the purpose of developing information materials describing model service programs.
4. The conducting of a program analysis of services for abused and neglected children in selected state and local communities, including the development of an evaluation system to measure the results of the protective services to be field tested in five localities.
5. The funding and designing of the guidelines for a state-of-the-art study on child neglect to complement the publication of the Office of Child Development.

Bureau of Community Health Services, National Institute of Child Health and Human Development, and National Institute of Mental Health

1. The Bureau of Community Health Services will fund new research projects that are related to various systems of the health care delivery and prevention of child abuse.

2. The National Institute of Mental Health will fund new research concerned with the mental health aspects of child abuse and neglect that are a significant force in causation, a factor in prevention, and a prevalent means of treatment, in order to fill identified gaps in knowledge, and through special studies aimed at suggesting solutions to problems already identified.
3. The National Institute of Child Health and Human Development will define a biomedical research program that will contribute to solving problems in child abuse and neglect and increase support of additional high quality research in the field.
4. Implement an evaluation project in selected communities to determine the effectiveness of child abuse services provided by the Bureau of Community Health Services, Maternal and Child Health programs, with emphasis on those situations where Maternal and Child Health programs have developed cooperative arrangements with local health agencies.

Office of Education

OE will fund two Title III projects in order to develop an effective model for training teachers to: (a) identify abused and neglected children; (b) work with other community resources to alleviate the problem; and (c) develop the skills necessary to aid abused and neglected children in overcoming emotional trauma in order that effective learning can take place in the classroom.

Section 2: Overview of Agency Plans for FY '74

The priorities and objectives emphasized by the member agencies in their plans for FY '74, were presented in the preceding section. Most of the agencies clearly intend to support research in many of the key areas that have been designated by the Interagency Panel as being in need of increased attention. Information about the amount of effort planned by agencies in regard to specific research issues and problems is presented in Appendix C. The lists of research questions were submitted to the members of the Interagency Panel on Early Childhood Research and Development, who in turn indicated whether their respective agencies plan (in FY '74) increased effort, decreased effort, the same amount of effort, or no activity in each research area, using FY '73 as a basis for comparison. It should be noted that under each main heading in Appendix C (e.g., the development of cognitive ability), a number of specific research questions are presented. These subcategories pertain to some (but by no means all) of the issues that currently are significant in early childhood research. It should be noted that agencies also may plan effort in areas of research that are not shown in Appendix C. Table 11 presents a summary of activity (includes increased effort and same amount of effort) planned by each agency in the general areas of research shown in Appendix C, while Table 12 shows the number of agencies that plan to support research in these general areas.

Table 12 indicates that the two categories in which the greatest number of agencies (11) plan to support research activity in FY '74 are research methodology and research dissemination. The methodology category includes the development and/or improvement of tests and measures, observational techniques, and longitudinal design; dissemination includes the study of diffusion and utilization of research findings, directed toward other researchers, schools, lay people, or policy planners, and the development of information and communication systems.

Another research category in which a number of the agencies anticipate substantial funding commitment is health care and services. Nine agencies intend to support research activity in the general health area, which includes research on maternal and child health programs, programs for handicapped and mentally retarded children, mental illness, nutrition, and the coordination of medical services.

Work on the basic developmental processes will continue to receive significant attention, as nine of the agencies plan activity in cognitive development, and eight plan activity in each of the areas of social-emotional and physical development. Nine of the agencies will support research efforts in the broad area of school and educational programs, which was the focus of strong support in FY '73, as were the developmental processes.

Table 11. Agency Plans for Major Research Effort in FY '74,
Areas of Research and Approaches to Research*
(Categories are not mutually exclusive)

	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
I. Areas of Research													
Cognitive Development	X	X	X	X	X			X	X		X	X	
Social-Emotional Development	X	X		X	X	X		X	X			X	
Physical Development	X	X	X	X	X	X		X				X	
Family	X	X	X	X	X	X	X	X	X			X	
Neighborhood	X	X		X		X	X	X				X	
Day Care	X			X	X	X	X	X				X	
Health Care and Services	X	X	X	X	X	X		X		X		X	
School and Educational Programs	X			X		X	X	X	X	X	X	X	
Alternatives to Day Care	X			X	X			X				X	

Table 11. Agency Plans for Major Research Effort in FY '74, Areas of Research and Approach to Research* (Categories are not mutually exclusive) (continued)

	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
Child Advocacy	X			X	X	X							
Child Abuse	X	X		X	X	X							
II. Approaches to Research													
Global or Ecological	X	X	X	X				X				X	
Research Methodology	X	X	X	X	X	X	X	X	X		X	X	
Research Planning	X	X	X	X	X	X		X				X	X
Research Dissemination	X	X	X	X	X	X		X	X		X	X	X

*Areas of expected major thrusts are indicated. The X-marks represent planned efforts in a particular category.

The Interagency Panel has recommended that research be oriented more toward the family as a significant factor in child development. It is noteworthy, in view of this recommendation, that ten of the agencies will give major support to issues directly related to the family. Activity in a wide range of specific research areas is anticipated, including the effects of family size on child development, determinants of stable family life, parenting skills, changing roles within the family, and the effects of school and community programs on the family. (See Appendix C for planned efforts related to other specific family issues, and Appendix A for information about agency emphases in family-related research.)

While only five of the 13 agencies plan to commit substantial funding to research on the problem of child abuse and neglect, this represents a significant increase over activity supported during FY '73. Detailed information about proposed research on child abuse was presented in the previous section of this chapter.

As Table 12 indicates, some areas will receive significant attention from relatively few of the agencies. Perhaps most significant here, in light of the Panel's recommendations, is the small number of agencies (six of 13) that report plans for research of an ecological nature. Seven agencies indicate an intent to place a primary emphasis on research oriented toward factors in the child's neighborhood or community.

In summary, agencies intend to continue to focus much of their efforts on areas of research that traditionally have received substantial attention (e.g., cognitive development and educational programs). Increased research activity is planned by many agencies, however, in areas that have been designated by the Interagency Panel as in need of more attention (e.g., research methodology, research dissemination, social-emotional development, and family-related issues). Some categories of early childhood research, such as the ecological approach and child advocacy, do not figure as significantly in the agencies' plans. These tables should be interpreted with some caution, however, as the agencies referred to in this report have missions and objectives that emphasize different problems areas and target groups. An agency may indicate little planned activity in a specific

Table 12. Selected Areas in Which Agencies Plan to Conduct Research in FY '74

N = 13*

Research Areas	Number of Agencies
Research Methodology	11
Research Dissemination	11
Family	10
Health Care and Services	9
Research Planning	9
Cognitive Development	9
School and Educational Programs	9
Physical Development	8
Social-Emotional Development	8
Neighborhood	7
Day Care	7
Global or Ecological	6
Child Abuse	5
Alternatives to Day Care	5
Child Advocacy	4

* NCET and Title III programs are not included.

category, such as neighborhood-related, if the particular research questions subsumed under that category do not reflect that agency's objectives and activities. The same agency may plan research, however, on other aspects of neighborhood-related issues that are not described by the question shown.

CHAPTER IV

PANEL PLANS FOR THE FUTURE - FY '74 AND BEYOND

The Interagency Panel on Early Childhood Research and Development has a number of unique features which contribute to its current and potential effectiveness in achieving the overall goal of the Panel, i.e., coordination of research planning and funding by Federal agencies concerned with early childhood. These unique features include: (1) a current record of all on-going Federally funded research on early childhood within the Information System; (2) a capacity to address interagency questions needing Federal policy; (3) the ability to provide information on research analyses and needs for use by all member agencies; (4) a relationship with the Interagency Panel for Research and Development on Adolescence to address the total age spectrum as it has meaning for Federal research efforts; and (5) the opportunity to organize special meetings with non-Federal groups and researchers for exchanges of knowledge and concerns relevant to interagency planning and funding of research on early childhood. Each of these features is discussed in terms of present as well as future activities.

Information System

The Information System, which contains abstracts of all on-going and newly initiated research from each member agency, provides a resource for future activities of the Panel. Some of these activities will be: (a) an analysis of research information around specific subject areas or target groups to provide member agencies with focused information for planning; (b) print-outs of selective research information upon request of member agencies; (c) search privileges by staff of member agencies to use the soft-ware of the Information System for study and planning. This System is the only one lending itself to such uses and the limits of utilization are probably set mainly by limits in our imagination.

Interagency Questions

The Panel will continue to explore questions of interagency significance which help agencies formulate policy. One of these questions concerns the problem of cross research analyses. Researchers frequently conduct their research, especially in the behavioral sciences, with independent definitions or constructs of variables and with self-developed or new measurement instruments. These activities are quite appropriate but limit the ability to compare research findings because of such individualized - definitions and constructs. To increase the possibility of cross-research analyses, the Panel is discussing at the Federal level and with professional organizations, appropriate policy to insure such cross-research analyses. A task force will address this problem and provide recommendations for policy decisions. One activity that will be undertaken is an analysis of data in the Information System around specific topics to determine the range of discrepancies in definitions of marker variables and marker measures. This kind of information will highlight the problem for the agencies as well as for the research community.

Research Analyses

The Panel will continue to analyze research activities, needs, and issues around topics of concern to Panel members and state-of-the-arts documents will be produced as requested.

Developmental Continuity

The Panel has a formal relationship with the Interagency Panel for Research and Development on Adolescence. All minutes of meetings, all reports and documents are shared by both Panels. The Panels have common agreements on policies for utilization of the Information System and use the same classification system for abstracting research information. Both Panels organize the annual reports in the same format so that comparisons are easily made. The Panels are addressing the problem of marker variables and marker measures jointly and will agree on a common policy. Increasingly, analyses will be made of research activities that span the entire age range included under the Panels so that future agency planning may reflect the developmental continuity of children and youth.

Non-Federal Interaction

The Panel organizes meetings around specific topics and areas of concern to which it invites non-Federal specialists and professional organizations to the exchange of information. Reports of these meetings are published and become working documents for the agencies. The Panel will continue to organize such meetings and publish working documents that consist of the proceedings and recommendations resulting from the meetings. Areas will be selected as the Panel determines. One meeting is planned for March of 1974 and will focus on the Family. Federal and non-Federal participants representing various disciplines will meet to react to the document developed by the Panel - The Family: Research Considerations and Concerns.

Work groups will address various issues of the Family in terms of research implications and the proceedings of the meeting will be published for use by researchers and research planners, both within and outside the Federal Government.

The Interagency Panel on Early Childhood Research and Development has accomplished a great deal during its third year and has reached a point where it may engage in more refined and sophisticated activities. The course of the Panel is set to accomplish in a variety of ways the purpose of the Panels, i.e., coordination of research planning and funding by Federal agencies concerned with adolescence.

Appendix A

Tables 13, 14, and 15

Agency Emphases in Family Related Research*

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*Taken from Harrell, A., Hurt, M. and Grotberg, E. H. The Family: Research Considerations and Concerns. Washington, D.C.: The George Washington University, Social Research Group, 1973.

Table 13. Research Questions Relating to the Internal Systems of the Family

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Investigations to determine the various family structures that exist in the United States; frequency; effects on parents (adults) and children	x	x	x			x	x			x	6
Descriptive studies of the life styles of families	x	x					x			x	4
Surveys of child rearing arrangements of various "types" of families	x	x	x								3
Study of decision-making processes in families	x	x					x				3
Identification of functions of the family at different stages of development	x	x	x		x						4
Experimental studies which indicate how parents learn how to act as parents	x	x	x		x						4
Examination of role-relationships and inter-generational influences among family members and identification of the forces or factors leading to change	x	x			x	x	x				5
Studies that focus more on the role of the father	x	x	x							x	4
What types of emotional security are needed by mothers to allow them to meet their children's needs ?	x	x	x		x						4
Studies that examine the impact of various kinds of labelling of children & families	x	x			x	x					4

Table 13. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Research concerning the effect upon child development of family size and/or spacing of children	x	x	x		x		x		x		6
Studies of values in families concerning sex education	x				x						2
Investigations concerning family participation in society and impact on child's development	x				x		x	x		x	5
Determination of sources of information used by parents	x				x		x				3
Research upon the impact of isolation upon families	x	x					x				3
Results of the impact of increased geographical mobility on families	x	x	x		x	x	x	x			7
Research on the impact of increasing leisure time	x		x			x	x				4
Descriptive studies to determine cultural attitudes and beliefs of the various ethnic and social class groups in which families hold membership	x	x	x		x		x	x			6
Impact of changing sex roles upon families	x	x									2
Effect of the family/home on the child's learning, lifestyle, and future educational achievement										x	1
Effects of varying degrees of involvement of children in family activities upon the value structure of adolescents										x	1

Table 13. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Research on the adjustment potential of the family; what kinds of changes is a family capable of making and how can these skills be acquired?							x				1
Population studies, especially investigations of fertility practices and patterns; family oriented health studies, including genetic studies, that focus on the intact survival of babies, the avoidance of birth defects, and the prevention, diagnosis and treatment of mental retardation	x				x						2
Investigation of family attitudes and practices regarding a child handicapped by neurological disease or other handicapping conditions					x				x		2
Investigation of the knowledge, attitudes, and practices of families in regard to nutrition					x						1

Table 14. Research Questions Relating to the Family and Transactions with the External Systems

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Investigations of the environmental and sociocultural factors impinging upon families (e.g., schools, hospitals, type of housing, geographical region, cultural group norms, etc.) and their relationship to child-rearing practices, family roles and functioning, etc.	x	x	x	x		x	x	x			7
Determination of what should be taught to potential parents that will aid child development	x	x	x	x	x		x	x	x		8
Determination of the kinds of organizations and services for families which will be needed in new population concentrations likely to be common in the future		x	x		x	x	x				5
Determination of the ramifications which family structure has upon children's achievement and the ways in which family structure relates to school structure (e.g., male vs. female teacher and absent father vs. mother; birth order in relation to sex of teacher and sex of present or absent parent)	x	x	x			x		x			5
Determination of the influence of the role of the school in the community in which the family is a part; i.e., how do school programs (e.g., adult education) affect the family; how does parent and/or child participation in school activities affect the child's achievement behavior; effects upon the family if school takes the role in showing parents how to help their children		x		x		x	x	x		x	6

Table 14. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Research on the impact upon children of parents interacting with the school (e.g., as aides, PTA, in planning, and decision-making, etc.)		x	x		x	x		x		x	6
Determination of the levels at which intervention with families might successfully take place	x	x	x		x	x	x				6
Determination of the strengths and weaknesses of various types of families in dealing with the society as a whole	x	x	x	x	x		x				6
Determination of the external supports needed by different types of families in order to determine the types of supplementary supports that should be provided by the neighborhood community and larger society		x	x	x	x		x				5
Studies to determine how we can effectively reach adolescents in delivering health services and/or educate them in good health practices that will affect child development	x	x	x	x	x		x	x			7
Research on ways to support and help parents assume a more active and aware role in promoting their child's developmental progress, including studies of kinds and effects of parental interaction with the school and determination of critical periods of interaction between the school, the child, and the family										x	1

Table 14. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Impact on families of providing educational services to handicapped children at the local school level and not in residential institutions								x			1
Studies on the delivery of health services, particularly the hospital/home interface at the time of child birth	x	x			x						3
Studies to identify institutional barriers such as discrimination and lack of availability that inhibit family access to services					x						1
Studies to determine effective ways to delivery of medical, cultural, recreational and nutritional services to farm families							x				1

Table 15. Research Questions Relating to both the Internal Systems of the Family and the Family and Transactions with the External Systems

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Investigations into the motivational aspects of the family processes, societal interactions, and intrafamily relations	x	x				x	x	x			5
Research on the impact of media and dissemination of various types of information upon families	x	x	x		x	x	x	x		x	8
Determination of how parent behaviors are learned; how parents structure and amend their environment when they rear children; how to build in intervention that will help them learn what we think is important to child development	x	x			x			x		x	5
Exploration of areas in which the family may be legally supplanted, e.g., mechanisms for supplying children with homes away from home; mechanisms for maintaining as many primary ties as possible, especially those that might keep children in their old neighborhoods		x		x	x	x	x				5
Identification of familial goals for children and how society can help the family meet these goals	x	x	x	x	x	x	x				7
Determination of societal expectations for the family; i.e., what should be provided the child by the family; if these needs are supplied externally, what does this do to the family?		x	x		x		x				4
Identification of societal forces which help keep families together or pull them apart	x	x	x	x			x				5

Table 15. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Study of existing models and prototypes for home-based education; how do the models differ from service-type programs that just provide care for children; in what sense is the home-based education cognitive, affective, etc.; do we obtain the affective development desired by bringing in professionals; what type of parent education components are required; is home-based education possible for older children (e.g., 8-9 year olds)?		x	x				x	x		x	5
Investigations concerning the impact upon the family of having a handicapped child and ways in which outside agencies can help them cope (including children with learning disabilities)	x	x			x	x		x	x		6
Investigation of the impact of housing arrangements and conditions upon families; e.g., size of living quarters, crowding	x	x	x		x	x	x				6
Determination of the impact of day care upon families and identification of families for whom day care is and is not helpful. How are employment patterns, absenteeism and job turnover affected by providing day care services in various kinds of residential areas?	x	x	x		x	x	x	x		x	8
Studies on most effective policies/actions to be taken by the federal/state/local governments and/or private institutions and businesses to maximize the development of a "healthy" family						x					1

Table 15. (continued)

	NICHD	NIMH	OCD	SRS	MCHS	ASPE	USDA	OE	NINDS	NIE	Frequency
Prevention and treatment of child abuse		x			x						2
Family related research that deals with the prevention, diagnosis or treatment of neurological disease or handicapping conditions and learning disability								x	x		2
What impact do economic shifts have on the cohesiveness and continuity of families ?							x				1

Appendix B

Summary of Activities of Special Interest Group Concerned with Marker Variables

SUMMARY OF THE SPECIAL INTEREST GROUP ON MARKER VARIABLES

Early during the period of the exploration of longitudinal research designs, the Early Childhood Panel, and later the Panel on Adolescence, recognized a strong need to develop some sort of alignment methodology to facilitate the comparison of the results from different research efforts. It was felt that too many studies yield results that are neither cumulative nor generalizable, thus necessitating an unreasonable number of replication studies before the findings can be translated into sound recommendations or programs bearing on immediate social problems and responsive to a wide variety of groups. To study these issues, a Special Interest Group on Marker Variables was formed.

The "marker variable" approach was adopted as having potential benefit for a wide variety of groups. Although the development and implementation will require the cooperative efforts of a broad range of institutions and individuals, the considerations of this point have been made in line with the needs of the Federal agencies and researchers concerned with cross-study comparisons. Eventually, it is hoped that contributions will be made by research consumers and persons concerned with programs in process, especially those in educational institutions, in order to make the effort a complete success.

As of this report, the Special Interest Group defines a marker variable as a variable representing a pertinent physiological or psychological phenomenon which facilitates comparison of cross-study results by providing a common base. The estimation of the marker variable is made through the use of a marker measure, for example, a psychological test or physical measure.

The Special Interest Group on Marker Variables has been exploring the feasibility of the development of a system of marker variables as a means by which greater comparability between research studies can be achieved. The Group is interested in marker variables as one strategy to gain more consistency and comparability among research findings concerning children and adolescents, while recognizing that other approaches are worthy of consideration, e.g., the encouragement of collaborative studies.

The following points, suggestions and considerations have emerged from a series of meetings with consultants having expertise in a wide variety of research areas:

1. The use of marker variables might best be interpreted as a strategy or tactic, rather than a solution to current problems in the field.

2. Researchers need not only to identify instruments that are suitable as "markers" but also to develop the overall strategy or process necessary for their effective use. The task at hand involves more than recommending a list of marker variables. A good deal of work on the standardization of the methodology and conditions related to the administration of those measures is necessary.

3. Marker variables and marker measures should be distinguished. Not only must researchers determine which variables are significant enough to warrant their use as "markers"; they must also delineate marker measures, i.e., determine how the underlying processes in question can be measured reliably and consistently across variations in time, samples, age, and situations, and develop the instrumentation to accomplish this. Thus, problems of construct validity, population validity, and ecological validity will have to be addressed within this effort to systematize research strategies and techniques.

4. Guidelines will have to be established which will indicate the appropriateness of the marker variable to various types of research. For instance, is the marker variable approach more useful for research at the field application level than at the level of ground-breaking, basic research? Related to this issue is the suggested distinction between "core" and "background" measures. Core variables include those of prime concern to the investigator, while background measures include those used primarily to align the study with other research. It may be feasible for researchers to define and develop their own core measures, but at the same time, to include the data from background measures (marker variables) that will allow the results of their studies and of other studies to be interpreted meaningfully within a common framework.

5. More specific theoretical and methodological problems have to be faced in regard to the question of what variables and measures are most useful for a particular age group or research paradigm. Any serious attempt to develop a taxonomy of marker variables and measures is likely to result in a very large number of items that can contribute information relevant to a variety of research questions. Thus, there is also a great need for an effective strategy for selection of the particular variables that are most appropriate for any one area of research. Furthermore, guidelines for the choice of marker variables should be linked to recommendations for the use of those variables and the standardizing of testing conditions--a point touched on above. A persistent theme of the Special Interest Group discussions is that none of these suggested efforts to systematize research activities can be successful if undertaken independently, and that all of them should be dealt with as interrelated components of a broad program to coordinate research methods and measures.

6. The Special Interest Group feels that the use of marker variables and multiple variable approaches in general might facilitate the interpretation of various long-term developmental changes in intellectual or socio-emotional behavior. Often such changes are determined by single measures, and consequently, it is not clear whether a particular behavior reflects the same underlying process at different age levels. The use of multiple variable approaches would allow the investigator to examine more complex correlation patterns, rather than just single behavioral measures, and thus have the means by which to determine the nature of the construct being measured at different age levels.

7. Included in any attempt to develop a matrix of marker variables and a strategy for their use, should be efforts to deal with problems that might arise. For instance, will attempts to encourage comparability and standardization also lead to the use of obsolete assessment instruments? Will research findings "fall behind" emerging social problems and questions? Will standardization of measures and constructs be undertaken before the field or area has developed sufficiently?

8. In order to get a measure of a given marker variable with the least bias possible, among other considerations, the marker measure results should not be used in an evaluative context. This implies that the results of the measure which is used as an estimate of the marker variable would not be used in a pre-post analysis.

9. One idea which might be included is that of an "accuracy of comparison" continuum. The goal which one is trying to reach is that of being able to compare studies and relate the results of those studies. Marker variables, as represented by marker measures, supposedly allow these comparisons by providing estimates of common salient constructs and characteristics of the samples involved in the studies. It follows that the more points of comparison one has, the better the estimate of comparability, and thus, the "continuum". Unfortunately, there is a trade-off between gain in comparability, and expense of the estimate in terms of effort and costs. It will, therefore, be necessary to develop guidelines in implementing this system to optimize this trade-off.

The problem with regard to the development of the marker variable concept includes not only the development of the marker variables themselves and the problems surrounding this development, but also the process of implementation in the field of research.

Turning now to the approach toward implementation, it has become apparent that due to the complexity of the marker variable approach the implementation process will have to proceed on multiple levels and at different rates. Initially, the mechanism for approaching the research field was to contact selected researchers from various fields for suggestions concerning the development of the concept and the approach. In addition to this, it is going to be necessary to approach the field at large by means of the journals of learned societies and discussion groups at the various conventions, such as the American Psychological Association, the American Educational Research Association, and a number of others. Both of these efforts currently are being undertaken.

Even at the present embryonic stage of development, it is apparent that the process will be exceedingly complex, and in some areas, the potential marker variables are not yet clear, to say nothing of the marker measures necessary for estimation of the variable. In the process of developing the marker variable concept into a system with potential for wide implementation, key elements will be cooperation and coordination between the funding agencies, the research field, and public policy makers.

APPENDIX C

Table 16

Changes in Research Effort for Agencies for FY '74 Plans

Using FY '73 as Basis for Comparison

+ = increased effort
- = decreased effort
S = same amount of effort
0 = no activity

I. The Developmental Process

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. The Development of Cognitive Ability													
1. Generalization of knowledge and skills; application to new situations	S	S	S	S		0		S	S	-		S	
2. Resolve discrepancies between theories of cognitive development	+	S		S		0		0	S	0		S	
3. Cognitive skills development in infancy	S	S	S	S	S	0		+	S	0		S	
4. Instruction for cognitive skills development	S	0		S		0	-	+	S	-	+	0	
5. Physiological underpinnings of cognitive development	0	S	S	S		0		0	S	0		0	
6. Nature of learning styles	+	S		S		0	-	S	S	0		S	
7. Reading as related to ethnic differences	+	0	S	S		0		0	S	0		0	

I. The Developmental Process (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
B. Social and Emotional Development													
1. The development of attachment	S	S		S	S	S		0		0		S	
2. The role of imitation and play in social development	S	S		S		0		S	S	0		S	
3. The relation between cultural variations and personality development	+	S		S		S	-	0	S	0		S	
4. Moral development	S	S		S		-	-	S		0		S	
5. Motivation	+	S		S		-	-	S	S	-		S	
6. Instruction for socio-emotional growth	+	0		S		S		S		-		S	
7. Social development in infancy	S	S		S	S	S		0		0		S	
8. The development of intergroup attitudes, including racism	S	S		S		S		0		-		0	

I. The Developmental Process (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
C. Physical Development													
1. Genetic and maternal-environmental events affecting fetal development	S	S	S	S	S	0		0		0		0	
2. Causes of premature birth and birth defects; infant mortality	0	+	S	0	S	0		0		0		0	
3. Effects of maternal and child nutrition on pre- and post-natal child development	0	+	S	S	S	0		0		0		+	
4. Studies associating childhood disease with the child's own life space	0	0	S	S		0		0		0		0	
5. Effect of maternal drug use on newborn children	0	+	S	+	S	+		0		0		0	
6. Physical education and recreation for handicapped children	+	0		0	S	+		S		0		0	

II. Effect of Primary Environmental Influences

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. How Family Characteristics Affect Child Development; e.g., Spacing of Children, Size	+	+	S	+		+	S	0		0		S	
B. Determinants of Stable Family Life	+	S		+		+		0		0		S	
C. Effects of Different Kinds and Quality of Parenting Skills	+	0		S		+		+		0		S	
D. Effects of Changing Roles Within the Family	+	S		+		0		0		0		S	
E. Changing Role of the Family in U.S. Society and its Effects on Children	+	0		+		0		0		0		S	
F. How the Family Copes With Special Problems, e.g., Handicapped Children	+	S		S	S	S		0		0		S	
G. How Global Environmental Variables are Mediated to the Child Through More Proximal Agents	+	0		S		0	-	0		0		0	
H. Impact on Children of Formal Learning Situation of the Schools Compared with Learning at Home	+	0		S		0	S	+		-		0	
I. Effects of School and Community Programs on Family	+	0		S		0	-	0	S	-		S	
J. Studies on the Dissemination of Information to Families to Promote Child Development	+	0		+		+	-	0		0		S	

III. The Effect of Primary Environmental Influences: Community and Society

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. Neighborhood													
1. Influences of peers on child development	S	S		S		S	S	0		0		S	
2. Influence of non-family adults on development	S	S		S		S		0		0		0	
3. Effect of community or neighborhood environmental conditions	+	+		S		S	-	0		0		S	
4. Effects on children of housing environment	S	+		S		S		0		0		0	
5. Specification of factors differentiating urban, suburban and rural life and their effects on young children	+	+		S		S	-	0		0		S	
6. Specification of what ghetto and slum living means to children's physical and mental development	S	S		S		S	-	0		0		0	
7. Effects of professional groups or institutions in the community	+	0		S		S		+		0		0	

III. The Effect of Primary Environmental Influences: Community and Society (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
B. Day Care													
1. Impact of day care experiences on child development	+	0		S	S	0		0		0		S	
2. Long-range effects of day care and preschool programs	+	0		S		0	-	0		0		0	
3. The effects of separation from the home on the young	S	0		0		+		0		0		0	
4. Effects of parent involvement on day care and preschool education	S	0		S		S	S	+		0		S	
5. Training needs for day care staff	+	0		S		S	-	+		0		S	

III. The Effect of Primary Environmental Influences: Community and Society (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
C. Health Care and Services													
1. Impact of maternal and child health programs and services	0	0		S	S	+		0		0		+	
2. Impact of programs for handicapped and mentally retarded children	+	0		S	S	S	-	S		+	+	0	
3. Detection and treatment of mental illness	+	0	S	+	S	+		0		0		0	
4. Innovation in the delivery of nutritional and health care	S	0		0	S	S		0		0		+	
5. Coordination of medical services	+	0		S	S	S		0		0		0	

III. The Effect of Primary Environmental Influences: Community and Society (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
D. School and Educational Programs													
1. General school-related research	+	0		S		0		S	S	S		S	
2. Individualized and diagnostic instruction	+	0		S		0		S		+	+	0	
3. Longitudinal studies on intellectual achievement	S	0	S	S		0		S		0	+	0	
4. Television as a medium of instruction	S	0		S		0		0	0	+	+	S	
5. Studies of effective program elements in Head Start, Follow Through, compensatory preschool programs	+	0		S		0	-	+	S	0	S	S	
6. Follow-up programs for studies of earlier preschool programs	+	0		S		+	-	S		0	+	0	
7. Training methods which will make effective skills available to early childhood teachers	+	0		S		0	-	+	S	0		0	
8. Training methods which will make effective child-rearing and instructional skills available to parents	S	0		S		0	S	+		0		S	

III. The Effect of Primary Environmental Influences: Community and Society (continued)

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
E. Alternatives to Day Care and Compensatory Education Programs													
1. Parents as teachers	S	0		+		0	S	+	S	0		+	
2. Older children as teachers	S	0		+		0	-	S	S	0		+	
3. Training teens for parenthood	S	0		+	S	0	-	0		0		+	
4. Combination of home and day care centers	S	0		S		0	-	0		0		+	
5. Effects of parental income maintenance on children	+	0	S	0		0		0		0		0	
6. Impact of employment programs for parents of child development	+	0		0		0	-	0		0		0	
F. Child Advocacy													
1. Children's rights	+	0		+		S		0		0		0	
2. Child abuse	+	+		+	+	+		0		0		0	
3. Adoption and foster family programs	+	0		S	S	+		0		0		0	

IV. The Global Approach and Combined and Comparative Effects

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. Whole Child, i.e., The Child as a Total Entity	+	S	S	+		0	-	S		0		0	
B. Total Life Space; Ecological Studies	+	+		+		0	-	S		0		S	
C. Comprehensive Programs or Settings (Effects of Combinations of Elements in Primary Environment)	+	0		+		0	-	S		0		S	
1. Comprehensive, validated child care and education models for infants	S	0		S		0		S		0		+	
2. Comprehensive, validated child care and education models for toddlers	S	0		S		0		S		0		+	
3. Comprehensive, validated child care and education models for preschool-age children	+	0		S		0	-	S		0		+	
4. Comprehensive, validated child care and education models for elementary school-age children	+	0		S		0	-	S		0		+	
D. Combined and/or Comparative Effects of Social Programs	+	0		S		0	-	0		0		S	

V. Research to Benefit All Children

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. What Works in Education and Family Care for Middle Class Children?	+	0		S		0		0		0		S	
B. What Works in Education and Family Care for the Bright and Able (Gifted) Child?	+	0		S		0		0		0	S	0	
C. What Works in Education and Family Care for Disadvantaged Children?	+	S		+	S	S		0		0	+	0	
D. What Works in Education and Family Care for Handicapped Children?	+	S		+	S	S		S		[illegible]	S	0	
E. Which Different Combinations of Programs Will Benefit Children With Different Back-Grounds and Home Environments?	+	0		+		0	-	0		[illegible]	[illegible]	[illegible]	
F. Negative Consequences for Minority Children of the Manner in Which Special Services are Delivered	+	0		+		S	-	0		0	+	+	
G. Curricula for Specific Ethnic Groups	+	0		0		0	-	0	S	+	S	0	

VI. Research on Methodology

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. Program Evaluation Procedures for Analyzing Complex Situations Containing Many Variables	+	0	S	S		S	-	+	S	0		S	
B. Program Evaluation Methods Which Measure the Relation of Specific Inputs to Specific Performance Outputs	+	0	S	S	S	S	-	+		0		S	
C. Systems to Insure that the Criteria Used to Measure Success Are Relevant to Program Characteristics	S	0		S		+	-	+	S	0		S	
D. The Refinement and Development of Techniques of Carrying out Behavioral Observations in Natural Ongoing Situations	+	0		+		S	-	+	S	0		S	
E. Methodology of Longitudinal Research	S	S	S	+		S	S	S		0		0	
F. Tests and Measures Development	S	S		+		S	S		-	0	+	+	
G. Development of Measures for Different Ethnic and Social Groups	+	0	S	+		S			S	0	+	0	

VII. Study of Research Planning and Dissemination

Area of Research	OCD	NICHD	NINDS	NIMH	MCHS	SRS	NIE	BEH	TITLE VII	BOAE	OPBE	USDA	HUD
A. Planning Multidisciplinary or Interagency Research	+	+	S	+		S		S		0		S	+
B. Conferences or Studies Relating to Federal Research Goals	+	+		+	S	S	-	+		0		+	+
C. Studies of Goals for Child Development	+	S		S		S	-	+		0		+	
D. Development of Information Collection, Processing and Analysis Systems, and Scientific Communication Networks	+	0		+	S	+		+		0		+	+
E. Studies of Diffusion, Dissemination and Utilization of Research Results	+	S	S	+	S	S	-	+	S	0		+	
1. Directed toward other researchers	+	S	S	+	S	-		S	S	0		S	
2. Directed toward schools and teacher training institutions	+	0		S	S	-		+	S	0		+	
3. Directed toward lay people	+	S	S	+	S	S		+	S	0		+	
4. Directed toward policy and program planners	+	S		+	S	+		+	S	0	+	S	

Appendix D

Guidelines and Procedures
for Use of Interagency Panel Information System

Section 1: Contents of the Interagency Panel Information System and User Information System and User Request Procedure

Early in the formative stages of the Interagency Panel on Early Childhood Research and Development, it was clear that in order to accomplish the goal of sharing data and coordinating planning, the Panel would need a system both for collecting and disseminating information about the ongoing research of Panel members. The system decided upon was a data bank incorporating information about the grants and contracts of the agencies, which pertained to early childhood research and development.

In the first year, the Panel developed a pilot research classification scheme, and research data was classified by each agency member of the Panel. For fiscal year 1971, the agencies again classified their own data, and this data became the basis for the computerized data bank. The decision was made to combine the systems into a unified classification scheme and to computerize the information to accommodate a growing volume of information and to allow for more detailed analyses of the data.

How the System Works

At the present time the grants and contracts for research and development in early childhood of the member agencies are characterized by use of a classification system which transforms the essential facts of each project into numbers. These facts include details relating to the process of child development and the various environmental influences, including intervention programs, which affect this development. The numbers associated with the relevant details for each project are entered onto a magnetic tape by the computer, along with the funding level and identifying information both on the agency sponsoring the research and the recipient of the grant or contract funds.

The data system is composed of three major files: (1) the name file; (2) the numeric file; and (3) the funding file. These files have been merged to form one data system master file.

(1) The name file contains the name of the funding agency, the agency identification number of the project, the project title, the recipient institution's name and address, and the principal investigator's name and address.

(2) The numeric file contains classified descriptors, any one of which may have been entered in the computer, depending on whether it qualified to describe some relevant characteristic of a given project.

(3) The funding file contains fiscal year funding for 1973. When available, funding for fiscal years prior to 1973 was also included in this file.

Requests may be made for any or all of the above information for one or more projects. In addition, brief resumes are available for FY '73 projects which summarize project objectives and methodology. This "literal" information may be requested separately, or the appropriate resumes may be attached to accompany information requested from the computer files.

How to Make a Request

A request for information about the projects included in the data system may be made by a written request, or a telephone call followed by a written request. The request should include a description which gives the specific characteristics in which the requestor is interested, including the nature of the sample (e.g., Black, gifted, six year olds) and/or a description of the research foci (e.g., cognitive development, metabolism, nutrition studies). Requests may be made for project information from all agencies or from individual agencies. A typical example of a request might be:

> Send titles and funding of studies that deal with preschool programs for Indian children, and have cognitive and/or social/emotional components, for all agencies.

In general, the more that the staff knows about the interests of the person making the request, the better will be the information provided. A simplified version of the classification scheme, presently being constructed, will assist users in knowing the kind of detailed project information that is available.

Project Catalog Available

In addition to meeting specialized requests, a "cataloging" of standard information on each project in the system will be made available to Panel members who wish to receive it. The catalog will be organized by agency and will include a brief resume of objectives and methodology, as well as the following information for each project:

a. Funding agency
b. Computer file number assigned to agency
c. Title of grant or contract
d. Name of recipient institution and address
e. Name of principal investigator and address
f. Funding level for current fiscal year

Agencies Currently in the System

Each project within the data system has a unique five-digit computer identification number. The first two digits represent the agency number and the last three digits stand for the number of particular project in the agency.

Agency Code	Agency
01	Maternal and Child Health Service (MCHS)*
02	National Institute of Mental Health (NIMH)
03	National Institute of Child Health and Human Development (NICHD)
05	Office of Child Development (OCD)
07	Social and Rehabilitation Service (SRS)
08	OE, Bureau of Education for the Handicapped (BEH)
13	National Center for Educational Technology (NCET)
15	National Institute of Neurological Diseases and Stroke (NINDS)
16	OE, Bureau of Elementary and Secondary Education, Division of Plans and Supplementary Centers (Title III)

*Now part of Bureau of Community Health Services, Health Services Administration.

Agency Code	Agency
23	OE, Bureau of Elementary and Secondary Education, Division of Bilingual Education (Title VII)
24	Department of Agriculture (USDA)
25	OE, Bureau of Occupational and Adult Education (BOAE)
26	OE, Office of Planning, Budgeting and Evaluation (OPBE)
29	Department of Labor (DOL)
30	National Institute of Education (NIE)

Research Information

Call or write:

Social Research Group
ATTN: Mr. Ron Ouellet
AAUW Building
2401 Virginia Avenue, N.W.
Washington, D.C. 20037

Telephone: 331-8706

Section 2: Policy Guidelines for Release of Information From Interagency Information System

As the work of the Panels on Early Childhood and Adolescence Research and Development becomes more visible to interested agencies and persons outside the Federal government, a greater demand will be placed on the information system for facilitating information.

Sources Requesting Information

It is anticipated that the majority of requests will originate from the following sources:

a. Panel agencies
b. Congressional personnel
c. Non-Panel Federal agencies
d. State and local agencies
e. Foundations
f. Professional organizations
g. Researchers in the academic community
h. Professional journals and media representatives

Information Available

The Social Research Group has the following types of information available on projects in the system:

a. Title of the project and sponsoring agency;
b. Name, address, and institution of the principal investigator;
c. A coded classification of the project, using the classification system developed by the Social Research Group staff;
d. An abstract of the content of the project proposal, or the Science Information Exchange Abstract, or agency prepared abstract; and
e. Funding for the fiscal year.

The information release policy and guidelines are predicated on the information provided by the funding agency. Given the assumption that the information available is intended to function as a guide to direct the requestor toward the principal investigator and/or the sponsoring agency for further information, the abstracts are kept as short and concise as possible. For those agencies who feel that the proposals contain information too explicit for dissemination, abstracts are prepared on the basis of either the Science Information Exchange abstracts or those prepared by the staff of the agency in question.

Therefore, the policy of both Panels is that all abstracts should be available to non-Panel members.

Although the funding levels are a matter of public record and thus are available to any requestor, the Social Research Group will not include this information in response to a general request. When a specific request for funding information is received, it will be honored.

In order to keep the Panel members informed of requests received by the Social Research Group, a log is kept of the following information:

a. Name of requestor

b. Nature of request

c. Information supplied in terms of the data maintained in the Social Research Group information system.

Reports on requests and responses are made at the regular meetings of the Panels.

Appendix E

Documents Prepared for the Interagency Panel on Early Childhood Research and Development

DOCUMENTS PREPARED FOR THE INTERAGENCY PANEL ON EARLY CHILDHOOD RESEARCH AND DEVELOPMENT

By the Social Research Group
The George Washington University, Washington, D.C.

Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood and Recommendations for the Future, and Executive Summary. Stearns, Searcy and Rosenfeld. October, 1971.

The History and Current Status of Federal Legislation Pertaining to Day Care Programs. Searcy and Ouellet, November, 1971.

A Review of the Present Status and Future Needs in Day Care Research. Chapman and Lazar, November, 1971.

Legislative Mandates for Early Childhood Research. Searcy and Ouellet, December, 1971.

Broad Agency Goals and Agency Research Objectives for FY '72. Searcy, December, 1971.

An Analysis of the Process of Establishing and Utilizing Research Priorities in Federally Funded Early Childhood Research and Development. Lazar, December, 1971.

The Status of Research in Children's Television. Searcy and Chapman, January, 1972.

The Present Status and Future Needs in Longitudinal Studies in Early Childhood Research and Development. Lazar, January, 1972.

Listing of Where to Send Grant, Project or Program Proposals. Searcy, January, 1972.

Listing of Research Issues for Panel Consideration. Lazar, January, 1972.

Early Childhood Research and Development Needs, Gaps, and Imbalances: Overview. Chapman, February, 1972.

Early Childhood Research and Development Needs and Gaps in Federally Funded Intervention Studies Within A Longitudinal Framework. Lazar and Chapman, March, 1972.

Informal Agency Contacts for Grant, Project, or Program Information. Outllet, March, 1972.

A Review of the Present Status and Future Research Needs of Programs to Develop Parenting Skills. Lazar and Chapman, April, 1972.

A Statement and Working Paper on Longitudinal/Intervention Research. Grotberg and Searcy, April, 1972.

Research Problems and Issues in the Area of Socialization. Sowder and Lazar, September, 1972.

Classification for Early Childhood Research and Development. A Working Draft. Searcy, September, 1972.

Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood, Second Annual Report. Grotberg, Searcy, and Sowder, November, 1972.

An Analysis of the Longitudinal/Intervention Research Funded by Member Agencies of the Interagency Panel on Early Childhood Research and Development in FY '72. Sowder, December, 1972.

The Family: Research Considerations and Concerns. Harrell, Hurt, and Grotberg, August, 1973.

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Grotberg, E.H. and Searcy, E.O. A Statement and Working Paper on Longitudinal/Intervention Research. Washington, D.C.: The George Washington University, Social Research Group, 1972.

Grotberg, E.H., Searcy, E.O. and Sowder, B.J. Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood, Second Annual Report. Washington, D.C.: The George Washington University, Social Research Group, 1972.

Harrell, A., Hurt, M. and Grotberg, E.H. The Family: Research Considerations and Concerns. Washington, D.C.: The George Washington University, Social Research Group, 1973.

Lazar, J.B. The Present Status and Future Needs in Longitudinal Studies in Early Childhood Research and Development. Washington, D.C.: The George Washington University, Social Research Group, 1972.

Lazar, J.B. and Chapman, J.E. A Review of the Present Status and Future Research Needs of Programs to Develop Parenting Skills. Washington, D.C.: The George Washington University, Social Research Group, 1972.

Shaie, K.W. "Can the Longitudinal Method be Applied to Psychological Studies of Human Development?" In F.J. Monks, W.W. Hartup, and J. de Wit (Eds.) Determinants of Behavioral Development. New York: Academic Press, 1972.

Sowder, B.J. An Analysis of the Longitudinal/Intervention Research Funded by Member Agencies of the Interagency Panel on Early Childhood Research and Development in FY '72. Washington, D.C.: The George Washington University, Social Research Group, 1972.

Stearns, M.S., Searcy, E.O. and Rosenfeld, A.H. Toward Interagency Coordination: An Overview of Federal Research and Development Activities Relating to Early Childhood and Recommendations for the Future. Washington, D.C.: The George Washington University, Social Research Group, 1971.